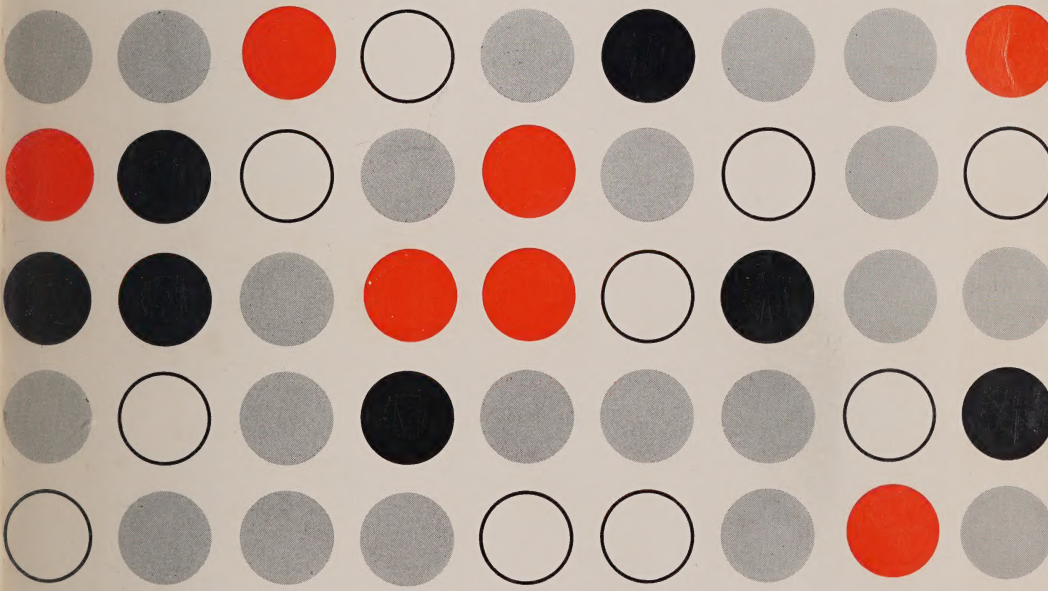
BUSINESS EDUCATION
IN A LIBERAL ARTS COLLEGE

CLARK UNIVERSITY
BUSINESS ADMINISTRATION PROGRAM



CLARK UNIVERSITY BULLETIN No. 215
WORCESTER, MASSACHUSETTS, SEPT. 1954

COVER

"Automation"—by Sante Graziani, Director, School of The Worcester Art Museum which with Clark University offers a joint program leading to the B.A. degree with a major in Fine Arts.

CLARK UNIVERSITY BULLETIN
NO. 215 SEPT. 1954

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Clark University
Business Administration Program

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The Purpose

OF COLLEGE EDUCATION IN BUSINESS

College instruction in business administration has amply demonstrated its value in preparing young men and women for careers in commerce and industry. Although there is no substitute for actual experience in developing sound business judgment, systematic study of business problems provides an essential background for the acquisition of this experience. Businessmen are looking more and more to colleges to provide the fundamental training which contributes so much to business leadership.

The modern business world has become so complex that one man's experience can encompass only a small fraction of the whole. Experience needs to be supplemented with the broad training provided by well-rounded college programs of business education. A program of study in college provides an opportunity to acquire the perspective and the capacity to think which are indispensable at the higher management levels.

Tremendous strides have been made in recent years in the development of principles underlying business techniques and procedures. Psychological principles are basic to successful selling, the administration of personnel relations and public relations generally. An understanding of economic trends is essential to many policy decisions. Statistical techniques which are dependent on basic mathematical processes provide the answers to many business problems. A knowledge of the legal basis of business and indeed of the whole political environment in which the business man must function is required by the growing magnitude and complexity of government regulations. Modern accounting analysis is an indispensable aid to successful business administration. Systematic study of these fundamental principles and techniques under competent instructors provides an effective approach to a business career.

Business Administration

IN A LIBERAL ARTS COLLEGE

CLARK UNIVERSITY has long been known for the excellence of its educational program in arts and sciences. Young men and women will find a real advantage in procuring their business education in conjunction with such a program. When Clark decided to offer a systematic course of study in business administration, it did so with the conviction that the same educational principles and methods which had made its work in arts and sciences outstanding were equally applicable to teaching business. The high standards of instruction that apply to the rest of the University also apply to the Division of Business Administration.

Modern trends in business education emphasize the importance of the basic and the general rather than the narrowly specific and technical. The most effective program of business education is one based on fundamental courses in economics, psychology, mathematics, the English language, and similar basic subjects. At Clark all the facilities of the arts and science programs are available to students of business. Subject to the requirements for the business degree, these students are entitled to attend all classes for which they are qualified, including those in psychology, economics, geography, history and other social studies, foreign languages, English, mathematics, chemistry and other natural sciences. Each student is expected to take several of these courses.

Of real value also is the opportunity to acquire training in specific subjects complementary to the major field of professional interest. Thus a young man or woman planning on a business career in the chemical industry may enroll in basic courses in chemistry. A student anxious to prepare himself for work in the field of foreign trade may acquire the necessary training in foreign languages, international relations and geography. One interested in the advertising profession may improve his skill in English composition and the practical arts. Many effective combinations of arts and sciences on the one hand and business on the other are possible.

The Clark business program prepares students for a wide variety of careers in business. Clark graduates have found success in many different lines of work. A list would include such varied occupations and positions as cost estimator, auditor, credit manager, traffic manager, office manager, sales engineer, production supervisor, assistant to general manager, claims adjuster, insurance broker, real estate broker, statistician, personnel work, advertising, investment analysis, retailing, market research, and many others.

The University maintains a Placement Bureau for students seeking employment after graduation. The Bureau makes available up-to-date information about job opportunities and schedules interviews between students and representatives of employing firms. Students seeking part-time employment are also invited to make use of the Bureau's services.

Close contact between faculty and students, with small conference groups, is a tradition at Clark

The Clark Program

IN BUSINESS ADMINISTRATION

CLARK UNIVERSITY offers a four-year program in business administration leading to the degree of Bachelor of Business Administration. A special administrative unit of the University, the Division of Business Administration, directs the business curriculum. Its function is to coordinate and integrate the work of the various departments and to exercise general supervision over the program.

The objectives of the Clark program of business studies may be stated briefly as follows:

1. To acquaint the student with the economic, political and social environment in which business must be conducted.

2. To give the student an insight into the basic nature of modern industry and commerce; to acquaint him with the organization, the procedures and general characteristics of business and to familiarize him with the principles common to all successful business enterprise.

3. To afford the student an opportunity to acquire experience in analyzing business problems; to provide him with the tools necessary for precise decision-making; and to sharpen his judgment in order that he may be better able to distinguish fact from fancy; in other words, to train him to think intelligently about business problems.

4. To train the student in the basic techniques common to all business; and to give him some proficiency in the accounting, statistical, selling and other technical skills required by a successful business career.

Instruction at Clark is characterized by close personal relations between students and faculty. Classes are small and informal discussion is encouraged. Members of the faculty are readily available for consultation and advice. Numerous courses utilize the case or problem method of instruction wherein the student becomes acquainted with actual business problems. Laboratories, work-rooms and conferences provide abundant opportunity for individual attention.

A cardinal principle of the Clark curriculum is that a small group of basic courses is preferable to a large number of less essential subjects. Before each course is offered it is scrutinized from the standpoint of its value as a mental discipline, the significance of its factual information in reference to the objectives of the program, and its effectiveness in augmenting the student's technical skills. This has led to the development of a basic "core" of studies in English, economics, mathematics, accounting, law, statistics, government and speech. Courses in these subjects are required of all candidates for the business degree. Approximately half of the entire program consists of these basic required courses.

The remaining half of a student's program normally consists of optional courses, which fall into one or the other of two general types. One type consists of advanced courses designed to give the student a mastery of some professional field in business administration. In this group are courses in accounting, finance, personnel management, labor relations, advertising and selling, foreign trade and industrial and office management.

The second type comprises courses in liberal arts and sciences. It is expected that at least one of these courses will be taken each year. Students are not restricted in their selections but may choose any undergraduate course for which they are eligible.

At the end of the sophomore year, each candidate for the degree of Bachelor of Business Administration prepares in consultation with his faculty adviser an integrated program of studies covering the junior and senior years. These programs indicate the student's area of special interest and the specific courses he intends to elect. Typical of these integrated programs are the following:

Accounting

Intermediate Accounting
Cost Accounting
Auditing
Advanced Accounting
Industrial Management
Federal Tax Accounting
Office Management

Marketing

Principles of Marketing
Salesmanship
Advertising
Foreign Trade
Sales Management
Market Research
Industrial Psychology

Foreign Trade

Principles of Marketing
Foreign Trade
Economic Geography
Industrial Psychology
International Economics
A foreign language

Personnel Management

Industrial Psychology
Personnel Management
Industrial Management
Office Management
Labor Problems

Management

Intermediate Accounting
Cost Accounting
Personnel Management
Industrial Management
Office Management
Industrial Psychology
Analysis of Business Problems

Finance

Business Statistics
Business Organization and Finance
Money and Banking
Public Finance
Business Cycles
Analysis of Business Problems

Exceptionally qualified students may enroll in an "honors" program. This enables a student to substitute independent work under the guidance of an instructor for not more than two formal courses. He may use this work to fill gaps in his program or to extend his studies into special areas not covered by formal courses. Upon completion of this independent study and the sustaining of a comprehensive examination at the end of his senior year, a student receives "Honors in Business Administration." To be eligible to undertake an honors program a student must rank in the upper third of his class.

Students who wish to carry a standard four-year program in arts and sciences and receive the degree of Bachelor of Arts may obtain an abbreviated program in business administration since most business courses also carry credit toward the arts degree. Students wishing to receive the arts degree must meet all requirements for this degree including those in English, fine arts, foreign languages and sciences. These students should normally major in the Department of Economics and Sociology. It is highly desirable that students should have settled in their own mind which degree they wish to work for when applying for admission. Although transfer is possible, it usually results in some loss of credit.

Other essential features of the Clark program are periodic lectures by prominent business men and field trips to neighboring industrial plants and business establishments.

Transfer Students

An increasing number of students who commence their college career in two-year junior colleges are finding it desirable to complete their education in a standard four-year institution. Clark accepts only those students who have demonstrated their ability to do satisfactory work at an advanced college level. Even with these students some loss of credit may occur. Because of the concentrated character of most two-year programs in business, students transferring to Clark may have an opportunity to broaden their programs by taking a considerable number of general courses during their third and fourth years. The record of each transfer student is given individual study and consideration so that he or she may take best advantage of those courses completed before transferring to Clark.

Facilities

All the facilities of Clark University are open to students of business. These include the library with its more than 200,000 volumes and 650 periodicals and newspapers, the gymnasium and other athletic facilities, the dormitories and eating hall, as well as the scientific laboratories and other facilities for instruction.

Worcester as the "industrial heart of the Commonwealth" provides an unexcelled setting for the study of business methods.

Clark has enjoyed the support and cooperation of Worcester people and has many close associations with Worcester business. A majority of the business faculty is connected in some capacity with local or national firms and gives the students the benefit of these connections.

Clark has numerous scholarships and loan funds to aid deserving students. These are available to business students on the same basis as to other students of the college. Further information may be obtained from the Director of Admissions.

The Clark University Placement Bureau is available to business students for counseling and guidance in respect to the choice of a career. Assistance is also given graduates in finding suitable positions.

Requirements for Admission to the Division of Business Administration

The requirements for admission to Clark in the Division of Business Administration are similar to those in the arts program. Admission may be either by certification or by examination. A total of 15 units is normally required, which may be distributed as follows:

Required subjects		8 units
English	3 units	
Mathematics (algebra)	1 unit	
Foreign Language	2 units[†]	
Social studies	2 units	
Elective studies (of which as many as 3 units may be in commercial subjects)		7 units
Total		15 units

"Certification" by the principal of the preparatory school in at least thirteen of the fifteen required units is normally necessary for admission without examinations. Applicants who cannot present the necessary number of certified units should arrange with the Director of Admissions to take examinations which are given by the College Entrance Examination Board. Further information and application blanks may be obtained from the

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[†] Normally required.

Director of Admissions or the Director of the Division of Business Administration.

A student applying for admission to Clark after attending another college is required to submit a letter of honorable dismissal, a complete transcript of his record at the institution last attended and such other information as the Committee on Admissions may request. If he is admitted he will be provisionally classified as a freshman, sophomore, junior, or senior and will be permitted to register for a program corresponding to this classification. He will not be given a final class rating until he has been in residence for at least one semester.

Requirements for Graduation with the Degree of Bachelor of Business Administration

For graduation with the degree of Bachelor of Business Administration, a student must complete a total of twenty year courses (nineteen in the case of veterans) or their equivalent in semester courses. A satisfactory scholarship record must be maintained throughout the entire program.

A nearly uniform program is normally required of all freshmen. It includes the following courses: Principles of Accounting (B.A. 117), Elements of Distribution and Production (B.A. 10), English Composition (Eng. 11a), Business English (B.A. 14b), Business Mathematics (B.A. 13), and Physical Training. One optional subject of a non-business character is also taken.

Additional courses required of all candidates for the degree of Bachelor of Business Administration are:

Business Statistics (B.A. 16)
Business Organization and Finance (B.A. 18)
Analysis of Business Problems (B.A. 220)
Business Law (B.A. 20)
Principles of Economics (Econ. 11)
Money and Banking* (Econ. 13)
Public Speaking (B.A. 17a)
Introduction to Government (Gov. 15)

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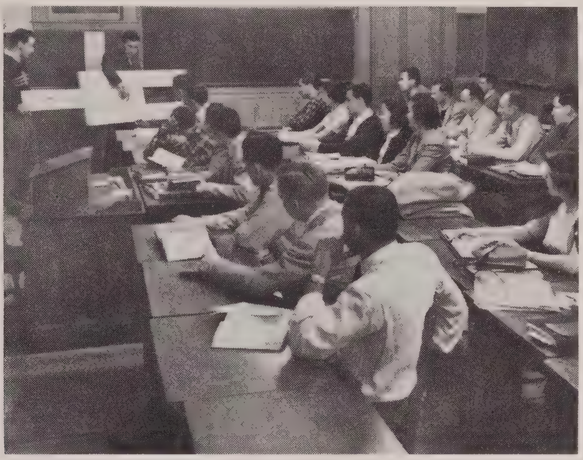
*Under special conditions Economics 13 may be replaced by certain other courses in Economics.

Candidates for the degree of Bachelor of Business Administration are subject to the same general University and College regulations as apply to candidates for the degree of Bachelor of Arts except in so far as these are modified by the special requirements of the business program.



Use of the slide rule is explained to students in a business statistics class

Tuition and Other Expenses

Tuition per year		$600.00
Dining Hall		380.00
Room Rent per year	from $180.00 to	250.00
Activities Fee		30.00
Books and Supplies (estimated)	65.00 to	75.00
Matriculation Fee (new enrollees only)		5.00
Diploma Fee (upon graduation)		5.00
Induction Fee (freshmen only)	men	15.00
	women	20.00

(All fees are subject to change)

The Business Curriculum

Following is a selected list of courses offered by Clark University of special interest to students of business. It should be noted that the list does not include the many offerings in foreign languages, natural sciences, and advanced courses in English, history, geography, psychology, economics and sociology. Descriptions of these courses will be found in the general catalog. All courses listed below are full year courses, except those marked by an asterisk (*) which are for a half year.

Accounting

B.A.	117	Principles of Accounting
B.A.	127	Intermediate Accounting
*B.A.	129a	Federal Tax Accounting
B.A.	128	Cost Accounting
B.A.	220	Analysis of Business Problems
*B.A.	227a	Auditing
B.A.	237	Advanced Accounting

Economics

Econ.	11	Principles of Economics
Econ.	13	Money and Banking
*Econ.	15a	Public Finance
*Econ.	19b	Economics of National Security
Econ.	21	Business Cycles
Econ.	22	Labor Problems
*Econ.	25b	Problems in Public Finance
Econ.	26	Government and Industry
*Econ.	29b	Economics and Transportation
*Econ.	206b	Economics of Industry
Econ.	207	International Economics

English and Public Speaking

*Eng.	11a	English Composition and Literature
*B.A.	14b	Business English
*Eng.	16b	Advanced Composition
*Eng.	111	Survey of American Literature
*B.A.	17a	Public Speaking
*B.A.	17b	Public Speaking

Geography

Geog.	10	Principles of Geography
Geog.	16	Economic Geography

History and Government

G.E.	14	Europe and the United States Since 1500
Hist.	235b	The United States in the 20th Century
Govt.	15	Introduction to Government

Management

B.A.	10b	Elements of Production
B.A.	18	Business Organization and Finance
B.A.	20	Business Law
B.A.	112	Introduction to Personnel Management
*B.A.	181a	Industrial Management
*B.A.	182b	Office Management
B.A.	183	Industrial Relations
B.A.	220	Analysis of Business Problems

Marketing

B.A.	10a	Elements of Distribution
*B.A.	23a	Advertising
*B.A.	23b	Salesmanship
*B.A.	27a	International Trade and Finance
B.A.	124	Principles of Marketing
*B.A.	125a	Retailing Principles
*B.A.	203b	Market Research
*B.A.	109b	Sales Management

Mathematics and Statistics

B.A.	13	Business Mathematics
B.A.	16	Business Statistics
Math.	11	Freshman Mathematics
Math.	17	Mathematical Statistics

Psychology

Psych.	11	General Psychology
*Psych.	190a	Industrial Psychology

Sociology

Soc.	11	Principles of Sociology

For further information and application blanks, address The Director of Admissions, Clark University, Worcester 10, Massachusetts.

Instructional Staff

KARL O. E. ANDERSON, Ph.D., *Associate Professor of English*

JOHN E. BELL, Ed.D., *Associate Professor of Psychology*

PHILIP H. BREEN, A.B., LL.B., *Lecturer in Business Law*

CHARLES T. BUMER, Ph.D., *Professor of Mathematics*

ROBERT F. CAMPBELL, Ph.D., *Associate Professor of American History*

MORRIS H. COHEN, Ph.D., *Associate Professor of Government*

CHARLES J. COLLAZZO, JR., M.C.S., *Assistant Professor of Business Administration*

GEORGE E. HARGEST, Ed.M., M.B.A., *Associate Professor of Economics and Business Administration*

JAMES M. HUND, Ph.D., *Assistant Professor of Economics*

ROBERT S. ILLINGWORTH, A.M., Ed.M., *Professor of Speech and Drama*

H. DONALDSON JORDAN, Ph.D., *Professor of English History*

EUGENE J. KELLEY, Ed.M., M.B.A., *Assistant Professor of Economics and Business Administration*

FREDERICK W. KILLIAN, A.B., LL.B., *Associate Professor of Economics and Sociology*

DWIGHT E. LEE, Ph.D., *Professor of European History*

DONALD LETENDRE, A.M. in Ed., *Assistant Professor of English*

JAMES A. MAXWELL, Ph.D., *Professor of Economics*

F. EUGENE MELDER, Ph.D., *Associate Professor of Economics*

RAYMOND E. MURPHY, Ph.D., *Professor of Geography*

JOSEPH A. NORDSTROM, M.S., *Assistant Professor of Business Administration*

ROGER C. VAN TASSEL, *Assistant Professor of Economics*

SEYMOUR WAPNER, Ph.D., *Associate Professor of Psychology*

HENRY J. WARMAN, Ph.D., *Associate Professor of Geography*

Administrative Staff

HOWARD B. JEFFERSON, President of the University

H. DONALDSON JORDAN, Chairman of the College Board

HENRY C. BORGER, Dean of Men

M. HAZEL HUGHES, Dean of Women

GEORGE H. MERRIAM, Director of Admissions

EUGENE J. KELLEY, Acting Director, Division of Business Administration

Faculty Committee on Business Administration

President HOWARD B. JEFFERSON, *ex officio*

EUGENE J. KELLEY, *Chairman*

JOHN E. BELL	H. DONALDSON JORDAN
GEORGE E. HARGEST	JAMES A. MAXWELL

RAYMOND E. MURPHY

Business Administration Advisory Committee

NATHAN T. BASCOM, *President*, Worcester Mechanics Savings Bank

JOHN W. COGHLIN, *President*, Coghlin Electric Company

HORACE GOOCH, *President*, Worcester Moulded Plastics Company

EVERETT M. HICKS, *Vice-President*, Norton Company

FREDERIC W. HOWE, *President*, Crompton & Knowles Loom Works

H. LADD PLUMLEY, *President*, State Mutual Life Assurance Company

PAUL W. SPAULDING, *President*, John C. MacInnes Company

RICHARD C. STEELE, *Business Manager*, Worcester Telegram Publishing Company

2

Program of Studies

THE EVENING COLLEGE

of Clark University

FALL SEMESTER

Beginning September 20, 1954

42 COURSES TO HELP YOU:

- advance yourself in your career
- obtain a degree in business administration
- obtain a degree in general studies
- broaden your knowledge generally
- enrich your mind culturally
- improve yourself socially

CLARK
UNIVERSITY

THE EVENING COLLEGE
OF CLARK UNIVERSITY
950 Main Street • Worcester 10, Mass.
TELEPHONE 6-1525

Calendar

September 13–17, Monday through Friday—Registration—6:00 to 9:00 P.M.

September 18, Saturday—Registration—9:00 to 12:00 A.M.

September 20, Beginning of classes—Registration through the week—6:00 to 8:00 P.M.

September 25, Last day of registration without penalty, 9:00 to 12:00 A.M.

October 12, Tuesday—Columbus Day, not a holiday.

November 11, Thursday—Veteran's Day, not a holiday.

November 25–28 inclusive—Thanksgiving recess.

December 19–January 3 inclusive—Christmas recess.

January 24–28, Monday through Friday—Registration for second semester—6:00 to 8:00 P.M.

January 31, Monday—Beginning of classes, second semester.

Program of Studies
THE EVENING COLLEGE
of Clark University

GENERAL INFORMATION

Clark University announces its listing of courses to be offered in the fall semester by the Evening College. All adults interested in furthering their education are welcome.

There are no formal admission requirements but a person should be a high school graduate or have the maturity and sustained interest which will permit him to derive the full benefit of his Evening College studies.

Courses, which are listed below, are available for both a business administration and a liberal arts program of studies. Some adults will undoubtedly wish to obtain a college degree. Others will want to learn more about subjects which can help them advance in their daytime jobs. Still others may just wish to broaden their knowledge generally or enrich their culture. All groups should find subjects to their liking in the variety of courses offered by the Evening College. Courses are approved for veterans eligible under the G.I. Bill. Auditors are required to pay full tuition charges and fees, but are not subject to examinations and consequently receive no credit for courses taken.

DEGREE PROGRAMS

The Evening College awards a Bachelor of Science in General Studies and a Bachelor of Science in Business Administration degree upon successful completion of 120 semester hours of credit. About one-third of the credits are earned in the field of major interest, another third in the liberal arts courses not a part of the major, and the remaining third are chosen as free electives. The average length of time required for completion of the program is eight years. Credits transferred from other institutions may substantially reduce the credits to be earned at Clark.

Further information or additional course announcements may be obtained from:

Mr. Robert M. Hyde, *Director*
Clark University, Worcester, Mass. Tel. 6-1525

COURSE REQUIREMENTS

FOR THE DEGREE BACHELOR OF SCIENCE IN GENERAL STUDIES

1. English Composition and Literature (or equivalent) . . . . 6 semester hours
2. Group A (Science and/or Mathematics) . . 12 semester hours
   Not more than 6 semester hours may be in any one field; at least one course must involve laboratory experience.
3. Group B (Social Science) . . . . 12 semester hours
   Not more than 6 semester hours may be in any one field; business administration courses may not be counted toward the completion of this requirement.
4. Group C-D (Language, literature or fine arts) 12 semester hours
   At least 6 semester hours must be in a foreign language, culture, or literature, and 2 semester hours in fine arts.
5. Major and Related Fields . . . . 42 semester hours
   Twenty-four hours must be in courses in the major subject area; the remaining 18 hours must lie in fields of study closely related to the major and approved by the major adviser. For completion of an acceptable major, grades in at least 33 of the 42 semester hours involved must be higher than "C–".
6. Free Electives . . . . 36 semester hours
   (In any courses acceptable toward the Bachelor of Science in General Studies degree.)

   Total credit required for the Bachelor of Science in General Studies degree . . . . . . 120 semester hours

FOR THE DEGREE BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION

A. COURSES IN GENERAL STUDIES (normally 52 semester hours)

1. English Composition and Literature (or equivalent) . . . . 6 semester hours
2. Group A (Science and Mathematics) . . . 12 semester hours
   Business Mathematics . 6 semester hours
   Additional Course . . . 6 semester hours

3. Group B (Social Science) . . . . 24 semester hours

Principles of Economics	6 semester hours
Money and Banking	3 semester hours
Introduction to Government	6 semester hours

Additional courses to make up total of 24 semester hours

4. Additional Courses in General Studies, preferably from Groups C and D (language, literature or fine arts) including a semester course in Public Speaking . . . . 10 semester hours

B. PROFESSIONAL COURSES (normally 68 semester hours)

1. Required Courses in Business Administration 36 semester hours

Elements of Distribution (Marketing)	3 semester hours
Elements of Production	3 semester hours
Principles of Accounting	6 semester hours
Business Statistics	6 semester hours
Business Organization and Finance	6 semester hours
Business Law	6 semester hours
Analysis of Business Problems	6 semester hours

2. Elective Courses in Business Administration, with a concentration in one or more of the following fields, up to . . . . 32 semester hours

Accounting
Economics
Finance
Management
Marketing
General Studies (in consultation with adviser)

Total credit required for Bachelor of Science in Business Administration degree . . . . . 120 semester hours

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GENERAL REQUIREMENTS FOR A BACHELOR'S DEGREE:

1. At least 30 semester hours, and usually the last 30 semester hours before graduation must be obtained at Clark University.

2. Quality standard:
   Courses with grades of D+, D, or D– may not be counted toward a bachelor's degree beyond one-quarter of the total credit required or, in the case of a transfer student, beyond one-quarter of the credit earned at Clark University.

3. Approval for candidacy:
   When a student has completed 30 semester hours at the Evening College (15 semester hours if the student presents 75–90 semester hours of transfer credits), he may apply, and be approved by the Director for candidacy for the degree.

Registration: Jonas Clark Hall

September 13–17, Monday through Friday—6:00 to 9:00 P.M.

September 18, Saturday—9:00 to 12:00 A.M.

September 20, Beginning of classes—registration through the week—6:00 to 8:00 P.M.

September 25, Last day of registration without penalty, 9:00 to 12:00 A.M.

Changes in class registration will be permitted by re-registration prior to the second class meeting only.

Minimum registration necessary for courses to be given—15.

Withdrawals

Requests for withdrawal must be made *in writing* and will become effective upon receipt in the Evening College office. *Discontinuance of attendance at classes or notice to the instructor does not constitute withdrawal. Partial refunds of tuition will be made only upon request, and receipt of written notice of withdrawal received prior to the end of the fifth week of the semester and upon approval by the Director.*

Tuition and Fees

Tuition for a two-semester-hour course is $34.00; for a three-semester-hour course $50.00. *Tuition must be paid at the time of registration* or by special arrangement with the Director.

A matriculation fee of $5.00 is required of all students registering in the University for the first time.

Fee for registration after the first class meeting—$3.00.

Language, Literature, and Cultural Studies

ENGLISH

EN.—E.11 ENGLISH COMPOSITION AND LITERATURE*

The purpose of English 11 is to develop clarity and accuracy in reading and writing and to introduce the student to the various types of literature.

PART I

William H. Carter, *Assistant Professor of English*

The first semester reviews the principles of rhetoric and aims to help the student develop sound critical principles in evaluating the short story and the drama.

Tuesday, 7:00–9:40. 3 semester hours credit. Tuition $50.

PART II

Edward H. Hastings, *Lecturer*

The second semester continues the emphasis on composition and carries on the study of literature by considering the novel and poetry.

Wednesday, 7:00–9:40. 3 semester hours credit. Tuition $50.

EN.—E.12 PUBLIC SPEAKING†

Robert S. Illingworth, *Professor of Speech and Drama*

A course in the fundamentals of public speaking including the more common speech situations such as speech of introduction, address of welcome, expository and impromptu speeches; problems in human relations; voice tests, vocabulary drill. (Limited enrollment.)

Monday, 7:00–9:40. 3 semester hours credit. Tuition $50.

EN.—E.143 THE MODERN NOVEL

John L. Bradley, *Assistant Professor of English*

A study of representative novels of George Eliot, Henry James, Thomas Hardy, Theodore Dreiser, Samuel Butler, Edith Wharton, D. H. Lawrence, Joseph Conrad, E. M. Forster, Aldous Huxley, Ernest Hemingway, and Virginia Woolf. The course is designed to illustrate certain structural and philosophical problems confronting significant British and American novelists.

Tuesday, 7:00–9:40. 3 semester hours credit. Tuition $50.

EN.—E.16 CREATIVE WRITING

Lecturer to be announced

An analysis will be made of several popular, current types of literature. Individual student aptitudes will be developed by intensive practice in creative writing. Frequent conferences will be arranged. Prerequisite: A year course in basic college English, or the permission of the instructor.

Thursday, 7:00–9:40. 3 semester hours credit. Tuition $50.

*Courses required for the B.S. in General Studies degree.

†Courses required for the B.S. in Business Administration degree.

ARMENIAN

AR.—E.1–2 ARMENIAN LANGUAGE

Armen Jerejian, *Visiting Professor from Columbia University*
Assisted by Arsen Jerejian, *Lecturer*

A study of modern Armenian for beginners, one hour of language analysis and one of written and oral practice.

Saturday, 9:00–10:50. 2 semester hours credit. Tuition $34.

AR.—E.3–4 INTERMEDIATE ARMENIAN

Armen Jerejian, *Visiting Professor from Columbia University*
Assisted by Arsen Jerejian, *Lecturer*

A review of the essentials of grammar, reading of moderately difficult texts, and oral practice. Prerequisite: Armenian 1–2 or equivalent.

Saturday, 11:00–12:50. 2 semester hours credit. Tuition $34.

AR.—E.5 ADVANCED ARMENIAN

Armen Jerejian, *Visiting Professor from Columbia University*

Modern Armenian and Literature or Classical Armenian. Prerequisite: Armenian 4 or equivalent. Hours to be arranged.

2 semester hours credit. Tuition $34.

AR.—E.116 HISTORY AND CULTURE OF ARMENIA AND THE NEAR EAST, MIDDLE AGES

Armen Jerejian, *Visiting Professor from Columbia University*

This course is devoted to the critical study of Armenia and Near-Eastern history and culture as revealed by medieval documents, in relation to the Armens-Byzantine, Persian, and Arabic History and culture, dealing especially with Early Christianity and Primitive Churches, the origin of schisms, the Christian Dogma, the origin of Pauline Christianity, the history of Byzantine Empire, Balkans, Persians, Caucasic peoples, Arabs, Seljuks, Turks, Mongols, Tatars, the study of Miniature Arts, Medieval commercial and cultural relations between Europe and the Near-East, the origin of the Gothic Arts, Crusaders, the origin of the European Renaissance, etc.

Friday, 7:00–9:40. 3 semester hours credit. Tuition $50.

SPANISH

SP.—E.11 BEGINNING SPANISH

Miss Helen G. Agbay, *Lecturer in Spanish*

This course offers an opportunity to obtain a basic foundation for a good listening, speaking and reading knowledge of Spanish and will be adapted to the needs of the class so that it may be helpful to business people and travelers as well as to those wishing to pursue a study of Spanish.

Tuesday, 7:00–8:50. 2 semester hours credit. Tuition $34.

SP.—E.12 INTERMEDIATE SPANISH

Raymond E. Barbera, *Instructor in Romance Languages*

Review of Grammar exercises in composition and pronunciation. Reading of Texts dealing primarily with Spanish America.

Monday, 7:00–8:50. 2 semester hours credit. Tuition $34.

MUSIC

MU.—E.19 THE DEVELOPMENT OF THE SYMPHONY

Edward H. Hastings, *Lecturer*

The evolution of the symphony from Haydn to the present. Major emphasis will be placed on Haydn, Mozart, Beethoven and Brahms; works by Berlioz, Sibelius, Tschaikovsky and Mahler will also be studied. While some ability to read music will be an advantage, it is not required.

Thursday, 7:00–9:40. 3 semester hours credit. Tuition $50.

ART

CH.—E.4 THEORY AND PRACTICE OF CHINESE PICTORIAL ART

Lee, Su Jan, *Lecturer*

A brief review of the development of Chinese pictorial art, explanation of types and art of script of different calligraphy, practice of the basic strokes and forms of Chinese characters, training in the use of the Chinese brush. Surveys of schools in Tang, Sung and Ming painting, study of the traditional characteristics of Chinese painting. Analysis of the fundamental differences between painting in China and in the West. Illustration and study through the works of Chinese creative artists. Practice in a variety of techniques, including brush, ink and water color.

Tuesday, 7:00–8:50. Non-credit. Tuition $34.

Science and Mathematics

BIOLOGY

BIO.—E.11 MAN AND THE ANIMAL WORLD

Rudolph F. Nunnemacher, *Associate Professor of Biology*

This course reviews the tremendous variety of forms in the animal kingdom and their special adaptations to life in the ocean, in fresh water, and on land. The structure and function of the human body is compared with that of other animal types to understand the basic problems of existence. The plant world will be presented in the spring semester. This course fulfills the laboratory science requirement for the Bachelor of Science degree.

Tuesday, 7:00–9:40 (Lecture). 4 semester hours. Tuition $67.
Thursday, 7:00–8:50 (Laboratory).

BIO.—E.14 THE IDENTIFICATION OF THE FLOWERING PLANTS

David Potter, *Professor of Biology*

A new course will be offered this fall the purpose of which will be to acquaint people with plants growing in and about their own homes. For this purpose an entirely new system of identification will be used. By use of this system one can easily identify any of the commoner plants within two or three minutes. If you would like to know how to tell the difference between the pines and the spruces, the oaks and the maples, the buttercups and the meadow rues, the grasses and the sedges, the common weeds of the garden and the common wild flowers of our woods and fields, spend an evening with us once a week. I am sure that you will be well repaid.

Wednesday, 7:00–9:40. 3 semester hours credit. Tuition $50.

GEOLOGY AND GEOGRAPHY

GEOL.—E.12 INTRODUCTION TO GENERAL GEOLOGY

Dieter H. Brunnschweiler, *Assistant Professor of Geology*

A course describing the structure and rock formations of the earth, and explaining the evolution of landscapes. Emphasis will be on the effect of physical forces on the local environment. The course will include illustrated lectures, laboratory and occasional field trips on Saturdays.

Wednesday, 7:00–9:40. 3 semester hours. Tuition $50.

GEO.—E.112 WHY THE WEATHER? (An Introduction to weather and climate principles)

Henry J. Warman, *Associate Professor of Geography*

A discussion of the basic elements needed for understanding the causes of types of weather and climate patterns. Some attention will be given to recent theories regarding air masses and climatic changes. A few practical exercises will be performed to enable a person to make a reasonable weather forecast.

Wednesday, 7:00–8:50. 2 semester hours credit. Tuition $34.

MATHEMATICS

MATH.—E.17 MATHEMATICS OF STATISTICS

Charles T. Bumer, *Professor of Mathematics*

This course is not merely a collection of commonly used formulas involving averages and other statistics, but rather purports to show how mathematical models for physical experiments can be used to determine the degree of confidence with which predictions can be made. Elementary theory of probability is explored. Questions about the significance of differences between statistics of samples are studied, and answers are given based on frequency distributions. Both large and small sample theory are studied. Regression curves fitted by the method of least squares and linear correlation are investigated. The course should be of value to persons interested in statistics, in scientific research, in educational measurements, to mention a few. A year of college mathematics or its equivalent is desirable for entrance into the course. Through the year.

Tuesday, 7:00–9:40. 3 semester hours credit. Tuition $50.

B.A.—E.13 BUSINESS MATHEMATICS (see BUSINESS ADMINISTRATION)

Social Studies

PSYCHOLOGY

PSY.—E.111 GENERAL PSYCHOLOGY

Seymour Wapner, *Associate Professor of Psychology*

An introduction to the principles of human behavior. A one semester course repeated in the spring semester and introductory to other courses in Psychology.

Monday, 7:00–9:40. 3 semester hours credit. Tuition $50.

PSY.—E.103 NORMAL PERSONALITY

Richard S. Lazarus, *Associate Professor of Psychology*

This course will deal with normal adult personality, our understanding of its nature and origins, and its relationship to problems of adjustment. Attention will be given to scientific approaches to the study of personality and the techniques for its measurement.

Thursday, 7:00–9:40. 3 semester hours credit. Tuition $50.

PSY.—E.171 THE SCHOOL AND ADOLESCENT CHILD

Dr. Theodore Leventhal, *Assistant Professor Affiliate in Psychology; Chief Psychologist, Child Guidance Center*

The mental and emotional development of the child from five years through adolescence, with emphasis upon personality growth and problems. No prerequisites.

Tuesday, 7:30–9:20. 2 semester hours credit. Tuition $34.

SOCIOLOGY

SOC.—E.12 PEOPLES OF THE WORLD

Albert Morris, *Chairman, Department of Sociology and Anthropology, Boston University*

An introductory course in Cultural Anthropology designed to acquaint students comparatively with a selection of peoples and cultures different from our own as an aid to objective analysis of contemporary society and as a basis for useful generalizations about human social behavior. This course and that of the following semester in *Social Organization* are the foundation for all advanced work in Sociology.

Monday, 7:00–9:40. 3 semester hours credit. Tuition $50.

SOC.—E.131b HUMAN RELATIONS AND POLICY MAKING IN BUSINESS AND INDUSTRY—Part II (see Business Administration)

PHILOSOPHY

PHIL.—E.13 INTRODUCTION TO SOCIAL PHILOSOPHY

Robert N. Beck, *Assistant Professor of Philosophy*

An introductory examination of the goals, purposes, and ideals of social process, and of the relation of that process to the individual good. No previous work in Philosophy required.

Monday, 7:00–9:40. 3 semester hours credit. Tuition $50.

HISTORY

I.R.—E.24 THE COURSE OF WORLD POLITICS, 1933–1954

Sherman S. Hayden, *Associate Professor of International Relations*

A survey of the course of world politics since 1933, with emphasis on the shifting patterns of power and the rise of new nations and revolutionary doctrines. A prerequisite of some knowledge of United States or Modern European History is required.

Wednesday, 7:00–8:50. 2 semester hours credit. Tuition $34.

CH.—E.3 COMMUNISM IN CHINA

Lee, Su Jan, *Lecturer*

A brief history of the communist movement in China, its organization and aims, affect on individuals and social structure and on the economy of the country. The discussions will also include the relations between the Peking regime and Russia, present status and future of Red China.

Monday, 7:00–8:50. Non-credit. Tuition $34.

EDUCATION

ED.—E.15 PRINCIPLES AND TECHNIQUES OF ATHLETIC COACHING

Rocheleau Granger, *Director, Physical Education*

The main emphasis in this course is upon those aspects of athletic coaching in High Schools or recreational programs which the beginning coach must know. Major stress is devoted to the fundamentals of basketball and baseball and how to teach them, and the offensive and defensive tactics of the players in different positions. Some study is also given to the prevention and care of injuries in athletics. Open to students with the consent of the instructor.

Monday, 7:00–8:50. 2 semester hours credit. Tuition $34.

ED.—E.16 PRINCIPLES OF RECREATIONAL AND GROUP LEADERSHIP

Miss M. Hazel Hughes, *Associate Dean for Women*

A discussion and lecture course presenting the philosophy, development and evaluation of leadership techniques for the training of volunteer and professional recreational leaders in their work with girls and young women. Open to students with the consent of the instructor.

Time to be arranged. 2 semester hours credit. Tuition $34.

ECONOMICS

EC.—E.111 PRINCIPLES OF ECONOMICS*

Roger C. Van Tassel, *Assistant Professor of Economics*

A study of the American economic system. The student needs no previous formal work in economics. He will examine and discuss basic facts and explanations and apply them to leading economic problems of the day. Typical subjects are: the nature of American capitalism; the price system; money, credit and banking; depression and inflation; economic growth; income distribution; labor; public finance; international trade.

Thursday, 7:00–9:40. 3 semester hours credit. Tuition $50.

EC.—E.206 ECONOMICS OF AMERICAN INDUSTRY

Sheldon Schaffer, *Lecturer in Economics*

Designed to explain the operations of the American economy in terms of its importance and typical industries, this course will survey such fields as coal, steel, textiles, chemicals, construction, agriculture, transportation, tobacco, etc., treating each industry as a unit. Attention will be devoted to consumer demand; price, advertising and service competition; technology, costs, labor and location; profit and investment, employment and production stability; and government anti-trust policy.

*Courses required for the B.S. in Business Administration degree.

Time and student interest permitting, some attention to the structure of Worcester industry.

Prerequisite: One semester course in business or economics, or permission of instructor based on adequacy of student experience.

Thursday, 7:00–9:40. 3 semester hours credit. Tuition $50.

EC.—E.21a BUSINESS CYCLES AND NATIONAL INCOME

Sheldon Schaffer, *Lecturer in Economics*

A study of recession, depression and inflation. Attention to some of the more promising business cycle theories and to such broad causal factors as private investment, inventory accumulation, consumer spending, savings, profits, interest, wage rates, and international trade, and their effects on national income, employment, and production. A study of monetary and fiscal policy, public debt management, price and wage controls, price supports, etc., as possible means of counteracting or eliminating undesirable income fluctuation.

Prerequisite: A one semester course in economics or business, or permission of instructor based on adequate field experience.

Tuesday, 7:00–9:40. 3 semester hours credit. Tuition $50.

Business Administration

B.A.—E.117 PRINCIPLES OF ACCOUNTING*

George E. Hargest, *Associate Professor of Economics and Business Administration*

The organization and use of financial records, with emphasis on their interpretation as well as on the techniques of procedure.

Wednesday, 7:00–9:40. 3 semester hours credit. Tuition $50.

B.A.—E.127 INTERMEDIATE ACCOUNTING

John R. Paine, *Lecturer*

A study of generally accepted accounting principles and procedures and their application to asset, liability and proprietorship accounts. The analysis of financial statements, including statements from incomplete data and the statement of application of funds. Emphasis is placed upon problem analysis and solution. This course may be entered at beginning of the second semester, but credit will not be given until both semesters have been completed.

Wednesday, 7:00–9:40. 3 semester hours credit. Tuition $50.

B.A.—E.128 COST ACCOUNTING

Jason E. Newton, *Lecturer*

A study of the basic principles of cost accounting and their application to the job order cost system. Especial consideration is given to the accounting for material, labor and manufacturing expenses and to the preparation of financial statements.

Monday, 7:00–9:40. 3 semester hours credit. Tuition $50.

B.A.—E.13 BUSINESS MATHEMATICS*

John S. Stubbe, *Associate Professor of Mathematics*

An elementary course designed to give the necessary foundation for an understanding of the basic processes involved in business transactions. Required for the degree of Bachelor of Science in Business Administration. Will not be offered in 1954–55. Through the year.

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*Courses required for the degree of B.S. in Business Administration.

Thursday, 7:00–9:40. 3 semester hours credit. Tuition $50.

B.A.—E.16 BUSINESS STATISTICS*

Joseph A. Nordstrom, *Assistant Professor of Business Administration*

This course is designed to give the student a knowledge of the basic statistical techniques and procedures as they are applied to business and economic data. Lectures and laboratory exercises. Indivisible Course. Given through the year. Required for the degree of Bachelor of Science in Business Administration.

Monday, 7:00–9:40. 3 semester hours credit. Tuition $50.

B.A.—E.124 PRINCIPLES OF MARKETING

Charles J. Collazzo, Jr., *Assistant Professor of Business Administration*

An analysis of the institutions and processes involved in the distribution of goods and services, including a study of consumer motivation, retailing and wholesaling institutions, and marketing policies and practices. Attention will be given to study and discussion of actual marketing problems.

Wednesday, 7:00–9:40. 3 semester hours credit. Tuition $50.

B.A.—E.20 BUSINESS LAW*

Philip H. Breen, *Lecturer in Business Law*

A study of the legal basis of business and the principles of statutory and common law as they affect business relationships; covering such subjects as contracts, property, sales, negotiable instruments and agency.

Monday, 7:00–9:40. 3 semester hours credit. Tuition $50.

B.A.—E.112 INTRODUCTION TO PERSONNEL MANAGEMENT

Harold Stanzler, *Personnel Manager, Collyer Insulated Wire Company, Pawtucket, Rhode Island, and Lecturer in Business Administration*

A survey of the policies, practices and theory underlying the management of manpower in industry. Representative topics studied are employee selection, training, promotion and transfer; wage payment; and morale. Research into actual industrial situations is included.

Monday, 7:00–9:40. 3 semester hours credit. Tuition $50.

B.A.—E.183 MANAGEMENT-EMPLOYEE RELATIONS

F. Eugene Melder, *Associate Professor of Economics*

This course deals with management-employee relationships with special reference to union and management bargaining. Opportunity for development of perspective and judgment as regards problems of management in shop industrial situations and under the law of labor relations is provided. Discussions and case methods are employed.

Thursday, 7:00–8:50. 2 semester hours credit. Tuition $34.

B.A.—E.131b (Soc.—E.131b) HUMAN RELATIONS AND POLICY MAKING IN BUSINESS AND INDUSTRY (Part II)

Frederick W. Killian, *Associate Professor of Sociology*

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*Courses required for the degree of B.S. in Business Administration.

A continuation of Part I (given Spring 1954). The emphasis in Part II will be on the theory and the analysis of social control of business and industry, organizational factors, bureaucracy, power, authority, decision making, small groups, and communication. Open to new students with permission of the instructor.

Tuesday, 7:00–9:40. 3 semester hours credit. Tuition $50.

Nursing Education

NURSING EDUCATION PROGRAM

In cooperation with BOSTON UNIVERSITY

Courses—primarily for graduate nurses—given in the late afternoon as part of a cooperative program leading to the degree of Bachelor of Science in Nursing granted by Boston University.

NU.—190X MODERN CONCEPTS OF MEDICAL-SURGICAL NURSING

Eva Schadt, *Associate Professor of Nursing, Boston University*

A study of the nursing care of patients with acute or long-term conditions that are found most prevalently, today. Discussions are planned to emphasize the preventive factors, modern therapy, and the combined efforts of members of the health team for the best restoration of the patient. A minimum enrollment of 30 is required.

Monday, 4:30–6:30. 2 semester hours credit. Tuition $35.

NU.—209X CHILD GROWTH AND DEVELOPMENT

Elizabeth Hall, *Professor of Nursing, Boston University*

Considers the physical, mental, social, spiritual and emotional growth patterns of children from infancy through adolescence to maturity. Special consideration is given to personality development as influenced by family. Demonstration, discussion, and lecture.

Tuesday, 4:30–6:30. 2 semester hours credit. Tuition $35.

Further information may be obtained from

MR. ROBERT M. HYDE, *Director*

CLARK UNIVERSITY, WORCESTER, MASSACHUSETTS

Tel. 6-1525

Program of Studies
THE EVENING COLLEGE
of Clark University

SPRING SEMESTER

Beginning January 31, 1955

COURSES TO HELP YOU:

- advance yourself in your career
- obtain a degree in business administration
- obtain a degree in general studies
- broaden your knowledge generally
- enrich your mind culturally
- improve yourself socially

THE EVENING COLLEGE
OF CLARK UNIVERSITY
950 Main Street • Worcester 10, Mass.
TELEPHONE 6-1525

Calendar

January 24–28, Monday through Friday—Registration—6:00 to 8:45 P.M.

January 29, Saturday—Registration—9:00–12:00 A.M.

January 31—Second semester begins.

February 22, Tuesday—Washington's Birthday, classes suspended.

April 2—Spring recess begins at close of classes.

April 11—End of spring recess, classes resume.

May 23–May 31—Final examinations.

May 30, Monday—Memorial Day.

Program of Studies
THE EVENING COLLEGE
of Clark University

GENERAL INFORMATION

The Evening College of Clark University announces its listing of courses to be offered in the spring semester, 1955. All adults interested in furthering their education are welcome.

Although there are no formal admission requirements, high school graduation is desirable. It is essential that persons possess maturity and sustained interest to the extent that they may profit from the study and instruction offered.

Through the Evening College working men and women may earn a college degree entirely by part-time evening study. Other adults who wish to study specific subjects among those listed to broaden their knowledge, for general cultural enrichment, or to advance themselves in their daily jobs, may register for courses of their choice. All groups should find subjects of interest and value in the variety of courses offered by the Evening College.

SPECIAL COURSES AND LECTURES

In addition to its program of regular college courses, the Evening College continues to develop special courses and lecture series for adults in the Worcester area. An announcement of these activities during the spring term will be found on page 12. The Evening College wishes to serve the community as effectively as possible, and invites suggestions concerning specific educational needs which the University can appropriately serve.

DEGREE PROGRAMS

The Evening College awards a Bachelor of Science in General Studies and a Bachelor of Science in Business Administration degree upon successful completion of 120 semester hours of credit. Approximately one-third of the credits are earned in the field of major interest, another third in the liberal arts courses not a part of the major, and the remaining third are chosen as free electives. The average length of time required for completion of the program is eight years. Credits transferred from other institutions may substantially reduce the credits to be earned at Clark.

Further information or additional course announcements may be obtained from:

Mr. Robert M. Hyde, *Director*
Clark University, Worcester, Mass. Tel. 6-1525

Students who plan to enroll for a program of studies leading to either degree are urged to consult a member of the Evening College Staff as far as possible in advance of the semester in which they plan to register. Official transcripts of work completed at other institutions should be forwarded at the request of the student directly to the Evening College of Clark University, 950 Main Street, Worcester, Mass.

COURSE REQUIREMENTS

FOR THE DEGREE BACHELOR OF SCIENCE IN GENERAL STUDIES

1. English Composition and Literature (or equivalent) . . . . 6 semester hours
2. Group A (Science and/or Mathematics) . . 12 semester hours
   Not more than 6 semester hours may be in any one field; at least one course must involve laboratory experience.
3. Group B (Social Science) . . . . 12 semester hours
   Not more than 6 semester hours may be in any one field; business administration courses may not be counted toward the completion of this requirement.
4. Group C-D (Language, literature or fine arts) 12 semester hours
   At least 6 semester hours must be in a foreign language, culture, or literature, and 2 semester hours in fine arts.
5. Major and Related Fields . . . . 42 semester hours
   Twenty-four hours must be in courses in the major subject area; the remaining 18 hours must lie in fields of study closely related to the major and approved by the major adviser. For completion of an acceptable major, grades in at least 33 of the 42 semester hours involved must be higher than "C–".
6. Free Electives . . . . 36 semester hours
   (In any courses acceptable toward the Bachelor of Science in General Studies degree.)

   Total credit required for the Bachelor of Science in General Studies degree . . . . . . 120 semester hours

FOR THE DEGREE BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION

A. COURSES IN GENERAL STUDIES (normally 52 semester hours)

1. English Composition and Literature (or equivalent)		6 semester hours
2. Group A (Science and Mathematics)		12 semester hours
Business Mathematics	6 semester hours	
Additional Course involving Laboratory Experience	6 semester hours	
3. Group B (Social Science)		24 semester hours
Principles of Economics	6 semester hours	
Money and Banking	3 semester hours	
Introduction to Government	6 semester hours	
Additional courses to make up total of 24 semester hours. Business Administration courses may not be used.		
4. Additional Courses in General Studies, preferably from Groups C and D (language, literature or fine arts) including a semester course in Public Speaking		10 semester hours

B. PROFESSIONAL COURSES (normally 68 semester hours)

1. Required Courses in Business Administration		36 semester hours
Elements of Distribution (Marketing)	3 semester hours	
Elements of Production	3 semester hours	
Principles of Accounting	6 semester hours	
Business Statistics	6 semester hours	
Business Organization and Finance	6 semester hours	
Business Law	6 semester hours	
Analysis of Business Problems	6 semester hours	
2. Elective Courses in Business Administration, in one or more of the following fields		6 semester hours

Accounting
Economics
Finance
Management
Marketing

C. FREE ELECTIVES (normally 26 semester hours)

Total credit required for Bachelor of Science in Business Administration degree . . . . . 120 semester hours

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GENERAL REQUIREMENTS FOR A BACHELOR'S DEGREE:

1. At least 30 semester hours, and usually the last 30 semester hours before graduation must be obtained at Clark University.
2. Quality standard:
   Courses with grades of D+, D, or D− may not be counted toward a bachelor's degree beyond one-quarter of the total credit required or, in the case of a transfer student, beyond one-quarter of the credit earned at Clark University.
3. Approval for candidacy:
   When a student has completed 30 semester hours at the Evening College (15 semester hours if the student presents 75–90 semester hours of transfer credits), he may apply, and be approved by the Director for candidacy for the degree.

REGISTRATION AND CLASSES

Registration will be held in Room 109, Jonas Clark Hall, according to the following schedule:

January 24–28, Monday through Friday, 6:00 to 8:45 P.M.
January 29, Saturday, 9:00 to 12:00 A.M.
January 31, classes begin.

The University reserves the right to withdraw courses for which the registration is less than 15.

LATE REGISTRATION—CHANGE OF SCHEDULE

Late registration will be permitted upon payment of the late registration fee *prior to* the *third* meeting of any class.

Changes of schedule may be made with permission of the Director *prior to* the *third* meeting of any class.

TUITION AND FEES

Tuition in the Evening College is charged at the rate of $17.00 per semester hour. Thus the tuition for a two semester hour course is $34.00, and the tuition for a three semester hour course is $51.00.

A matriculation fee of $5.00 is required of all students registering in the University for the first time.

A late registration fee of $3.00 is charged for registration after the first meeting of any class.

A $3.00 fee is charged for each make-up examination.

DEFERRED PAYMENT OF TUITION

Students who find it convenient to defer payment of their tuition may do so in accordance with the following schedule approved by the Trustees:

During registration—25% of tuition plus all fees
At the end of the second week—25% of tuition
At the end of the fourth week—25% of tuition
At the end of the sixth week—25% of tuition

No charge is made for the privilege of deferment, but a $1.00 fee will be charged for late payment of any installment. No exceptions to this policy are authorized.

WITHDRAWAL AND REFUND OF TUITION

Requests for withdrawal must be made *in writing* and will become effective upon receipt in the Evening College office. *Discontinuance of attendance or notice to the instructor does not constitute withdrawal.* Partial refunds of tuition will be made only under these circumstances and in accordance with the following schedule approved by the Trustees:

Withdrawal by the end of the second week—75%
Withdrawal by the end of the fourth week—50%
Withdrawal by the end of the sixth week—25%
After six weeks—no refund

SPECIAL NOTICE TO VETERANS

All credit courses offered by the Evening College are approved for eligible veterans under P.L. 346 and P.L. 550. However, current V.A. regulations require that a student be enrolled for a specific educational or professional objective, with the result that veterans wishing to use benefits must enroll either in one of the degree programs described earlier, or set up a professional objective in consultation with a member of the staff. Veterans are referred for further information to their local V.A. officer.

COURSE OFFERINGS

LANGUAGE, LITERATURE, AND CULTURAL STUDIES

Armenian

AR.—E.2 ARMENIAN LANGUAGE—PART II

Armen Jerejian, *Visiting Professor from Columbia University*
Assisted by Arsen Jerejian, *Lecturer*

A study of modern Armenian for beginners, one hour of language analysis and one of written and oral practice. Open to qualified new students with permission of the instructor.

Saturday, 9:00–10:50. 2 semester hours credit.

AR.—E.4 INTERMEDIATE ARMENIAN—PART II

Armen Jerejian, *Visiting Professor from Columbia University*
Assisted by Arsen Jerejian, *Lecturer*

A review of the essentials of grammar, reading of moderately difficult texts, and oral practice. Prerequisite: Armenian 1, 2, 3 or permission of the instructor.

Saturday, 9:00–10:50. 2 semester hours credit.

AR.—E.116 HISTORY AND CULTURE OF ARMENIA AND THE NEAR EAST, MIDDLE AGES

Armen Jerejian, *Visiting Professor from Columbia University*
Assisted by Arsen Jerejian, *Lecturer*

Devoted to the critical study of Armenia and Near-Eastern history and culture as revealed by medieval documents, in relation to the Armens-Byzantine, Persian, and Arabic History and culture, dealing especially with Early Christianity and Primitive Churches, the origin of schisms, the Christian Dogma, the origin of Pauline Christianity, the history of Byzantine Empire, Balkans, Persians, Caucasic peoples, Arabs, Seljuks, Turks, Mongols, Tatars, the study of miniature arts.

Friday, 7:00–9:40. 3 semester hours credit.

English

EN.—E.11 ENGLISH COMPOSITION AND LITERATURE**

Designed to develop clarity and accuracy in reading and writing, and to introduce the student to the various types of literature.

PART I

Instructor to be announced

A review of the principles of rhetoric. The student is helped to develop sound critical principles in evaluating the short story and the drama.

Tuesday, 7:00–9:40. 3 semester hours credit

**Required for the degrees of Bachelor of Science in General Studies and Bachelor of Science in Business Administration.

PART II

Continued emphasis on composition. The study of literature is carried on by a consideration of the novel and poetry. Prerequisite: En.—E.11 Part I or the equivalent.

Section A, Tuesday, 7:00–9:40. William H. Carter, *Assistant Professor of English*

Section B, Wednesday, 7:00–9:40. Edward H. Hastings, *Lecturer*

3 semester hours credit.

EN.—E.13 PUBLIC SPEAKING AND HUMAN RELATIONS

Robert S. Illingworth, *Professor of Speech and Drama*

Panel discussion, impromptu speaking, open forum, reports, campaign speeches, parliamentary procedure, committee meetings, program planning, job applications and interviews, problems in human relations. En.—E.12 is recommended as a prior course, but new students will be admitted. Enrollment limited.

Friday, 7:00–9:40. 3 semester hours credit.

EN.—E.16 CREATIVE WRITING—PART II

William E. Harris, *Lecturer*

Further discussion of the fundamental techniques of creative and factual writing in their several forms. Individual student aptitudes will be developed by intensive practice in writing. Personal conferences will be arranged. Minimum average: 1,000 words per week. Prerequisite: a full year course in basic college English, or permission of the instructor.

Thursday, 7:00–9:40. 3 semester hours credit.

EN.—E.117b ENGLISH ROMANTIC POETRY

John L. Bradley, *Assistant Professor of English*

A study of representative poems by Wordsworth, Coleridge, Byron, Shelley, and Keats will be the core of the course. Attention will be given to biographical material, to textual analysis, and to the main currents of English Romanticism.

Wednesday, 7:00–9:40. 3 semester hours credit.

Music

MU.—E.13 TWENTIETH CENTURY MUSIC

Relly Raffman, *Instructor in Music*

An examination of the works of Debussy, Ravel, Stravinsky, Hindemith, Schoenberg, Bartok, and other significant composers whose compositions have been the driving force behind the great tonal advances of the last fifty years in regard to technical devices and historical precedent. The influence of Jazz on both American (Gershwin, Copland and Bernstein) and European music will be discussed as well as Jazz in its pure state. Although a general knowledge of music and a limited ability to sight read will be helpful, they are not essential.

Tuesday, 7:00–9:40. 3 semester hours credit.

MU.—E.21 MASTERPIECES OF CHORAL MUSIC

Edward H. Hastings, *Lecturer*

A study of choral music from Bach to Honegger. Major emphasis will be placed on Bach's MASS IN B MINOR, Handel's MESSIAH, Beethoven's MISSA SOLEMNIS, Brahms' GERMAN REQUIEM, Berlioz' DAMNATION OF FAUST and Honegger's KING

David. Works by Haydn, Verdi and Walton will also be discussed. While some ability to read music will be an advantage, it is not required. The primary purpose of the course is to help the student to a greater appreciation and understanding of some of the great choral masterworks.

Thursday, 7:00–9:40. 3 semester hours credit.

Spanish

SP.—E.11 BEGINNING SPANISH—PART II

Miss Helen G. Agbay, *Lecturer*

This course offers an opportunity to obtain a basic foundation for a good listening, speaking and reading knowledge of Spanish and will be adapted to the needs of the class so that it may be helpful to business people and travelers as well as to those wishing to pursue further study of the language. Open to qualified new students with permission of the instructor.

Tuesday, 7:00–8:50. 2 semester hours credit.

SP.—E.12 INTERMEDIATE SPANISH—PART II

Raymond E. Barbera, *Instructor in Romance Languages*

Review of grammar exercises in composition and pronunciation. Reading of texts dealing primarily with Spanish America. Open to qualified new students with permission of the instructor.

Monday, 7:00–8:50. 2 semester hours credit.

SCIENCE AND MATHEMATICS

Biology

See announcement of SPECIAL COURSES on page 12.

Geology

GEOL.—E.12 INTRODUCTION TO GENERAL GEOLOGY—PART II

Dieter H. Brunnschweiler, *Assistant Professor of Geology*

A course describing the structure and rock formations of the earth, and explaining the evolution of landscapes. Emphasis will be placed upon the effect of physical forces on the local environment. Includes illustrated lectures, laboratory, and occasional field trips on Saturday. Open to qualified new students with permission of the instructor.

Wednesday, 7:00–9:40. 3 semester hours credit.

SOCIAL STUDIES

Economics

EC.—E.111 PRINCIPLES OF ECONOMICS—PART II*

Roger C. Van Tassel, *Assistant Professor of Economics*

A study of the American economic system. Students examine and discuss basic facts and explanations and apply them to leading economic problems of the day.

*Required for the B.S. in Business Administration degree.

Typical subjects are: the nature of American capitalism; the price system; money, credit and banking; depression and inflation; economic growth; income distribution; labor; public finance; international trade.

Thursday, 7:00–9:40. 3 semester hours credit.

EC.—E.209 AMERICAN INDUSTRIAL PRACTICE AND PUBLIC POLICY

Sheldon Schaffer, *Lecturer*

A study and evaluation of such important industries as coal, steel, textiles, chemicals, construction, agriculture, transportation, tobacco, etc., treating each as a unit. Examination of such factors as consumer demand, price, advertising, technological change, costs, location, profits, investments and labor. Special attention to questions of desirable social performance and government anti-trust policy.

Monday, 7:00–9:40. 3 semester hours credit.

EC.—E.211 CAPITALISM, SOCIALISM AND DEMOCRACY

Sheldon Schaffer, *Lecturer*

Comparative economic systems. The nature of capitalism, socialism, and fascism, with reference to the United States, Great Britain, the Soviet Union, Italy and Germany before 1945, and other nations. Although the emphasis will be upon economic structure, consideration will be given to philosophic and political matters.

Tuesday, 7:00–9:40. 3 semester hours credit.

History

HIST.—E.23 AMERICAN COLONIAL HISTORY, 1607–1775

George H. Merriam, *Lecturer*

A survey course with particular emphasis upon the New England area and the Revolutionary period.

Friday, 7:00–9:40. 3 semester hours credit.

HIST.—E.117 EUROPE IN TWO WORLD WARS

Dwight E. Lee, *Professor of Modern European History*

Beginning with the origins of the first World War, the course deals, by means of lectures and discussions, with both the national and international politics of Europe down to the present time. Emphasis will be placed upon the great powers, though some attention will be paid to the smaller nations, especially during the inter-war period.

Thursday, 7:00–9:40. 3 semester hours credit.

AMERICA COMES OF AGE (see announcement of SPECIAL COURSES on page 12).

Philosophy

PHIL.—E.15b TYPES OF RELIGIOUS PHILOSOPHIES

Robert N. Beck, *Assistant Professor of Philosophy*

An examination of some of the major religious ideas in Western culture, and of their institutional embodiment.

Monday, 7:00–8:50. 2 semester hours credit.

Psychology

PSY.—E.111 GENERAL PSYCHOLOGY

Seymour Wapner, *Associate Professor of Psychology*

An introduction to the principles of human behavior.

Monday, 7:00–9:40. 3 semester hours credit.

PSY.—E.194 THE PRE-SCHOOL CHILD

Theodore Leventhal, *Assistant Professor (Affiliate) in Psychology; Chief Psychologist, Child Guidance Center*

The personality of the child, including adjustment difficulties, during the formative years from 0 to 5. No prerequisites required.

Tuesday, 7:30–9:20. 2 semester hours credit.

PSY.—E.203 ABNORMAL PERSONALITY

Richard S. Lazarus, *Associate Professor of Psychology*

The course will be devoted to a study of the development of the abnormal personality and a survey of the major types of abnormal behavior. A prior course in psychology is recommended.

Thursday, 7:00–9:40. 3 semester hours credit.

Sociology

SOC.—E.11 UNDERSTANDING OUR SOCIETY

Albert Morris, *Chairman, Department of Sociology and Anthropology, Boston University*

Designed to provide a conceptual framework through which the structure and processes of contemporary society may be made more meaningful. Consideration will be given to social relationships and problems associated with families, communities, the church, the state and other human groupings, and to the concepts of social change, social disorganization and social improvement.

Monday, 7:00–9:40. 3 semester hours credit.

SOC. } B.A. } —E.186 LAW, POLICY AND INDUSTRY

Frederick W. Killian, *Associate Professor of Sociology*

Social control of business and industry by law. The function, structure and operation of law. How law draws on and applies social and economic ideas for its operation. The critical points of decision making. Law as a remedial system for social and economic conflict. Problems of the law. Legislation and the judicial process; the legal and judicial mind and method. Law as ritual and "ritualism" in law. The myth of "the law."

Verbal reports of case analysis—selected cases—readings, projects prepared at home, final examination.

Tuesday, 7:00–9:40. 3 semester hours credit.

BUSINESS ADMINISTRATION

B.A.—E.13 BUSINESS MATHEMATICS—PART II*

John S. Stubbe, *Associate Professor of Mathematics*

An elementary course designed to give the necessary foundation of the basic processes involved in business transactions. Open to qualified new students with permission of the instructor.

Thursday, 7:00–9:40. 3 semester hours credit.

B.A.—E. 16 BUSINESS STATISTICS*

Joseph A. Nordstrom, *Assistant Professor of Business Administration*

Designed to provide a knowledge of the basic statistical techniques and procedures as they are applied to business and economic data. Lectures and laboratory exercises. Open to qualified new students with permission of the instructor.

Monday, 7:00–9:40. 3 semester hours credit.

B.A.—E.20 BUSINESS LAW—PART II*

Philip H. Breen, *Lecturer in Business Law*

A study of the legal basis of business and the principles of statutory and common law as they affect business relationships; covering such subjects as contracts, property, sales, negotiable instruments and agency. Open to qualified new students with permission of the instructor.

Monday, 7:00–9:40. 3 semester hours credit.

B.A.—E.112 INTRODUCTION TO PERSONNEL MANAGEMENT—PART II

Samuel Lukens, *Lecturer*

A survey of the policies, practices and theory underlying the management of manpower in industry. Representative topics studied are employee selection, training, promotion and transfer; wage payment; and morale. Research into actual industrial situations is included. Open to qualified new students with permission of the instructor.

Monday, 7:00–9:40. 3 semester hours credit.

B.A.—E.117 PRINCIPLES OF ACCOUNTING—PARTS I AND II*

The organization and use of financial records, with emphasis on their interpretation as well as on the techniques of procedure.

PART I Charles L. Sanders, *Lecturer.* 3 semester hours credit.

PART II Open to qualified new students.

Professor George Hargest, *Associate Professor of Economics and Business Administration*

Wednesday, 7:00–9:40. 3 semester hours credit.

B.A.—E.113 CREDITS AND COLLECTIONS

Charles J. Collazzo, Jr., *Assistant Professor of Business Administration*

The principles and practices of commercial credit, the nature and function of credit, the use of credit instruments, the organization of a credit department, sources of credit information, the investigation and analysis of credit risk, the elements of good credit risk and the qualifications of a credit man.

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*Required for the degree of Bachelor of Science in Business Administration.

Wednesday, 7:00–9:40. 3 semester hours credit.

B.A.—E.127 INTERMEDIATE ACCOUNTING—PART II

George J. White, *Lecturer*

A study of generally accepted accounting principles and procedures and their application to asset, liability and proprietorship accounts. The analysis of financial statements, including statements from incomplete data and the statement of application of funds. Emphasis is placed upon problem analysis and solution. Open to qualified new students with permission of the instructor.

Wednesday, 7:00–9:40. 3 semester hours credit.

B.A.—E.128 COST ACCOUNTING—PART II

Jason E. Newton, *Lecturer*

A study of the basic principles of cost accounting and their application to the job order cost system. Special consideration is given to the accounting for material, labor and manufacturing expenses and to the preparation of financial statements. Open to qualified new students with permission of the instructor.

Monday, 7:00–9:40. 3 semester hours credit.

SPECIAL COURSES AND LECTURES

AMERICA COMES OF AGE—A Television Course

Robert F. Campbell, *Associate Professor of History*

A comprehensive examination of the great historical events of the past 50 years as they have contributed both to the rapid rise of the United States as a world power and the enormous increase of governmental responsibility for economic stability and general welfare within a democratic framework. Topics will include the Progressive Movement, the United States in World War I, the Twenties, the Depression, the New Deal, World War II, the Cold War, and America Today. By means of lectures, films and discussions, emphasis will be placed not only upon the events themselves, but as well upon their sources in such earlier events as the Westward Movement and the Industrial Revolution.

Offered in cooperation with WWOR-TV, Channel 14. Wednesday 7:30–8:00 p.m. 2 semester hours credit. Tuition, $34.00. Persons not desiring credit may enroll as subscribers. For further information, please write the Director.

THE IDENTIFICATION OF WILD FLOWERING PLANTS

David Potter, *Professor of Biology*

Designed to acquaint people with plants growing about their homes. Although some attention will be devoted to cultivated plants, the major emphasis will be upon the wide variety of wild plants of this area, including trees. By means of a new system of identification, rapid distinction between various wild flowers, grasses and sedges, weeds, conifers, oaks, and maples will be able to be made. The lectures will include guest speakers, slides, and field trips to be arranged.
Offered in cooperation with the Garden Clubs of Worcester County.

Thursdays for twelve weeks, beginning February 3—7:30–9:00 p.m.
Fee: $22.00 Non-credit.

HUMAN REPRODUCTION

Rudolph F. Nunnemacher, *Associate Professor of Biology*

The story of the prenatal development of man revealing the creation of a new life, the early molding of body form, the growth of the fetus from minute embryo to newborn. The discussions will include the inheritance of parental characteristics, explanations for some of the rare congenital abnormalities, the nourishment of the fetus and the process of birth. Slides and films will be used to illustrate the lectures.

Eight lectures. Thursday, 7:30–9:00 p.m., beginning March 3.
Fee: $15.00 Non-credit.

LI.—E.1 TRAINING PROGRAM IN LIBRARY TECHNIQUES

Instructors to be announced

The second half of a series of six courses designed for librarians of small town, school, or specialized libraries, and library assistants in larger libraries who wish to become more familiar with modern methods of library organization and administration. Upon completion of six units of instruction, Clark University will award a Certificate of Achievement. During 1955 the University will offer Book Selection, Work with Children and Young People, and Mechanics of Library Processes.

Although these courses carry no academic credit, they provide excellent in-service training, a basis for vocational upgrading in a library system, or opportunity to prepare for the position of Library Technician. *The course will begin in late spring. Inquiries should be addressed to the Director.*

Nursing Education

In cooperation with BOSTON UNIVERSITY

NU—450X WARD ADMINISTRATION

Bess Ellison, *Assistant Professor, Boston University School of Nursing*

For the nurse seeking preparation for Head Nursing. Deals with consideration of the activities and current problems related to the head nurse unit, the functions of head nurses and the administrative skills and tools suitable for directing nursing care and nursing service in the head nurse unit.

Tuesday, 4:30–6:30. 2 semester hours credit. Tuition: $40.00.

PSY.—E.111 GENERAL PSYCHOLOGY

Seymour Wapner, *Associate Professor of Psychology*

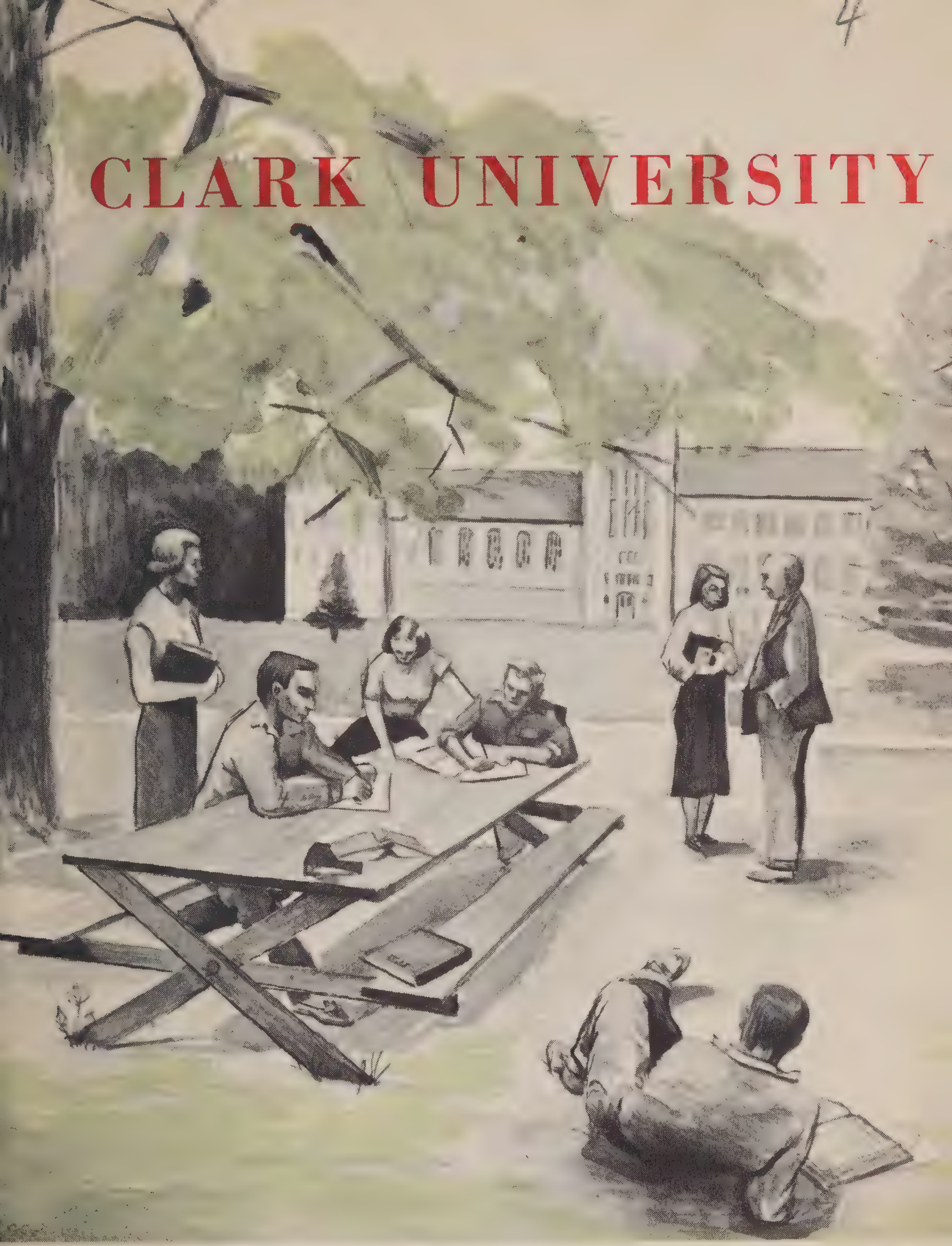
An introduction to the principles of human behavior.

Monday, 7:00–9:40. 3 semester hours credit.

This course satisfies the prerequisite for Principles and Methods of Teaching, and may be taken as an elective in the program leading to the B.S. degree in Nursing at Boston University.

Candidates for a degree in Nursing may also satisfy certain other requirements in liberal arts by means of Evening College courses. For further information, consult the Director.

CLARK UNIVERSITY



1955

SUMMER SCHOOL

Intersession June 6 — June 25
Summer Session June 27 — August 10

CLARK UNIVERSITY BULLETIN

Number 217 January, 1955

Clark University

SUMMER SCHOOL

Intersession, June 6—June 25
Summer Session, June 27—August 10

1955

The Bulletin is published four times a year, January, February, March, and December.

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CALENDAR

June

6 *Intersession Registration* 9–12 Noon
First class meetings 3 P.M.

25 Examinations for Intersession Courses 9–12 Noon

27 *Summer Session Registration* for day classes 9–12 Noon
for evening classes 6:30 to 8:30 P.M.

28 Day classes begin 8 A.M.

29 Assembly for all Summer School students, Auditorium 12:30 P.M.

29 Evening classes begin 6 P.M.

July

4 A holiday

5 Evening classes postponed from holiday

9 Day classes postponed from holiday

15–16 Writers' Conference

16 Examinations in Ed. S.223 and Geo. S.20

18 Beginning of Ed. S.217, Ed. S.261, Geo. S.28 and Soc. S.12

August

8 Examination for classes meeting at 8 A.M.—9 to 12 Noon
for evening classes meeting at 6 P.M.—7 to 10 P.M.

9 Examination for classes meeting at 9:15 A.M.—9 to 12 Noon

10 Examinations for classes meeting at 10:30 A.M.—9 to 12 Noon
for classes meeting at 11:45 A.M.—2 to 5 P.M.
for evening classes meeting at 8 P.M.—7 to 10 P.M.

The cover was designed by David Orrell, student at the School of the Worcester Art Museum which cooperates with Clark University in offering a major in Fine Arts under the A.B. degree.

A Unique Opportunity to Learn

The 1955 Clark University Summer Session is an experiment designed to provide a unique opportunity for summer college study in Central Massachusetts. Intensive instruction in numerous fields will be offered in the intimate and pleasant atmosphere of a small university. In an effort to provide as broad an educational experience as possible, the University will make available a varied program of informal afternoon discussions and teas, evening lectures and conferences, and week-end excursions to famous New England cultural and recreational centers.

Throughout the program emphasis will be placed upon effective learning through a synthesis of superior teaching, individual attention, and a relaxed, pleasant atmosphere. Small classes will meet outdoors at various campus locations.

Members of the regular Clark faculty, assisted by distinguished visitors, will teach a variety of undergraduate and graduate courses in liberal arts, business and education. Both day and evening classes will be offered.

Clark is ideally located for summer study in Worcester, an outstanding cultural center in the heart of New England. The summer climate is pleasant, and the city is within easy reach of mountains, lakes, and superb New England scenery. A multitude of important and interesting historical points are only a short distance away.

DETAILS OF INTEREST

A refreshment and social hour for all students and faculty will be held in the shade of the campus trees Tuesday and Thursday afternoons at 4:15 P.M. This will be followed by an informal seminar open to all, at which a member of the faculty will discuss some particular phase of the course which he is conducting, of general interest and pertinent to our times. By attending these seminars the student has the opportunity of broadening his horizons and becoming more widely acquainted with the faculty and their special interests.

Summer School students will have the opportunity of attending the Writers' Conference July 15th and 16th at special rates. Details may be had by writing to the Director of the Summer School.

Clark University has excellent library facilities featuring an "open shelf" system with an opportunity for unlimited browsing. The number of modern books and professional periodicals available is large and varied. The map library is almost uniquely rich.

A group of eleven university students from Sweden will be visitors at Clark during the last two weeks of the Summer Session through special arrangement with the Experiment in International Living. A similar group from Switzerland will also be visiting classes at about the same time and joining our students in all activities to understand student life in an American University and to promote international good will. It is hoped that some of the Summer School students will avail themselves of the unusual opportunity of having one of our foreign visitors as their house guest during their two weeks' sojourn in Worcester.

ADMISSIONS

Students are eligible for admission to the Summer School if they are undergraduate or graduate students at Clark University or elsewhere. Freshmen beginning their college studies in the summer must present a statement of admission to a recognized college. Persons of maturity who are not candidates for academic degrees may also pursue their scholastic interests at the University. Clark Evening College students can be admitted to any scheduled classes, but are urged to plan their program with Mr. Robert Hyde, Director, Evening College.

Admission to the Summer School does not guarantee admission to the regular terms.

An application for admission is included on the last page and should be filled out and submitted at an early date to facilitate registration.

DEGREES AND CREDITS

All courses offered are accepted at Clark for credit toward the degrees of Bachelor of Arts and Bachelor of Business Administration, or the Evening College degrees of Bachelor of Science in General Studies and Bachelor of Science in Business Administration. Many courses in the Summer School count toward the degrees of Master of Arts, Master of Arts in Education, and Doctor of Philosophy. Approval should, however, be obtained in advance from a student's major department.

The degree of Master of Arts may be obtained in certain fields by completing satisfactorily a full-time program for five summers. It is best for students interested in such a program to discuss their plans directly with the Chairman of the department concerned. Graduate students formally registered in the Summer School may, with the approval of their major department, enroll in thesis courses under the direction of regular members of the Staff other than those listed in the present Bulletin.

Each single course offered in the Summer School is equivalent to a half-year course of the academic year and yields three semester hours of credit. The double courses in the languages, which meet for two lecture periods a day for six and one-half weeks are equivalent to year courses (six semester hours credit).

The double courses: Education S.223 and Geography S.20, which meet during the first three weeks (June 27 to July 16) of the Summer Session yield three semester hours credit; Education S.217, S.261, Geography S.28 and Sociology S.12 which meet during the second three weeks (July 18 to August 10), also yield three semester hours of credit.

A student may carry in a normal program one course in the Intersession (three semester hours) and two courses in the Summer Session (six semester hours). Permission to carry an additional course may be granted in exceptional cases if approved in writing by the Dean prior to registration.

TUITION AND FEES

A matriculation fee of $5.00 is required of all students entering Clark University for the first time. The tuition for each three semester hour course is $60.00. Persons who wish to audit a course without receiving credit register and pay tuition at the stated rate. Students carrying two courses during the Summer Session may audit a third course without additional cost. An activities fee of $3.00 is required of all students. Tuition and fees are payable at the Bursar's Office immediately following registration. A fee for late registration of $1.00 per day, to a maximum of $5.00 must be paid by students who fail to complete registration within the official Registration Period.

LIVING FACILITIES AND COSTS

Dormitory facilities for both men and women are available, but reservations should be made promptly on or before June 1. Room rent is $15.00 for the Intersession and $32.50 for the Summer Session. A deposit of $10.00 is required in advance to hold a room. A list of living quarters outside of the University is available through Mrs. I. F. Clark, Graduate Office, Room 109, Clark University.

VETERANS

Veterans attending the 1955 Summer School should either present their supplemental Certificate of Eligibility at the Veterans' window in the Bursar's Office not later than Friday of the first full week of the term or pay the tuition. All tuition paid will be refunded shortly after the Certificate of Eligibility is at hand. The Director of the Summer School should be consulted when unusual or unexpected situations arise.

ELIGIBILITY FOR COURSES

Courses beginning with "1" are open to all undergraduates except freshmen. Courses preceded by an "F" are open to freshmen. Courses beginning with "2" are open to advanced undergraduates and graduate students. Teachers working towards degrees or credits in Education should consult with Professor Vernon Jones, Chairman of the Department of Education.

Intersession courses meet for two 70 minute periods at 9:00 A.M. and at 3:00 P.M., Monday through Friday. Summer Session courses during the day meet for one 70 minute period Monday through Friday. Double courses meet for two 70 minute periods five days a week. Evening classes meet for 140 minutes on Monday, Wednesday and Friday evenings. Exceptions to the above time schedule are listed under course descriptions. Classes will be held on Saturday, July 9, to compensate for the July 4 holiday on Monday.

ADMINISTRATIVE OFFICERS OF THE UNIVERSITY

Howard B. Jefferson, *President*
Rudolph F. Nunnemacher, *Director of the Summer School*
H. Donaldson Jordan, *Chairman of the College Board*
Henry C. Borger, Jr., *Dean of Men*
M. Hazel Hughes, *Dean of Women*

SUMMER SCHOOL STAFF

(All are members of the Clark University Faculty unless otherwise indicated)

Karl O. E. Anderson, Ph.D., *Associate Professor of English and Chairman of the English Department*
Robert N. Beck, Ph.D., *Assistant Professor of Philosophy*
Marvin D. Bernstein, Ph.D., *Visiting Lecturer, Instructor, Worcester State Teachers College*
Henry C. Borger, Jr., Ph.D., *Associate Professor of Education*
Dieter Brunnschweiler, Ph.D., *Assistant Professor of Geography*
Guy H. Burnham, M.A., *Instructor in Geography; Cartographer*
Robert F. Campbell, Ph.D., *Associate Professor of American History*
Albert S. Carlson, Ph.D., *Visiting Lecturer, Professor of Geography, Dartmouth College*
William H. Carter, Ph.D., *Assistant Professor of English*
Charles J. Collazzo, Jr., M.C.S., *Assistant Professor of Business Administration*
Tamara Dembo, Ph.D., *Associate Professor of Psychology*
James S. Edwards, M.A., *Assistant Professor of German*
Francis O. Graf, A.B., *Visiting Lecturer, Manager, Connecticut General Life Insurance Company*
Sante Graziani, M.F.A., *Visiting Lecturer, Head of the School of the Worcester Art Museum*
George E. Hargest, M.B.A., *Associate Professor of Business Administration and Acting Director of Division of Business Administration*
Edward H. Hastings, M.A., *Visiting Lecturer, Lecturer in Clark University Evening College*
Vernon Jones, Ph.D., *Professor of Educational Psychology and Chairman, Department of Education*
H. Donaldson Jordan, Ph.D., *Professor of English History*
Bernard Kaplan, Ph.D., *Lecturer in Psychology*
Frederick W. Killian, LL.B., *Associate Professor of Sociology*
Donald H. Letendre, M.A., *Assistant Professor of English*
James A. Maxwell, Ph.D., *Professor of Economics*
F. Eugene Melder, Ph.D., *Associate Professor of Economics*
Albert Morris, Ph.D., *Visiting Lecturer, Chairman, Department of Sociology and Anthropology, Boston University*
Raymond E. Murphy, Ph.D., *Professor of Economic Geography*
Joseph A. Nordstrom, M.S., *Assistant Professor of Business Administration*
Rudolph F. Nunnemacher, Ph.D., *Associate Professor of Biology*
David Potter, Ph.D., *Professor of Biology*
J. Richard Reid, Ph.D., *Associate Professor of Romance Languages*
Harris Rosenkrantz, Ph.D., *Visiting Lecturer, Staff member, Worcester Foundation for Experimental Biology*
Dayton D. Shepherd, M.A., *Visiting Lecturer, Principal of Durham School, Durham, Connecticut*
John S. Stubbe, Ph.D., *Associate Professor of Mathematics*
Irwin M. Tobin, Ph.D., *Visiting Lecturer, Labor Attaché, American Embassy, Vienna*
Henry J. Warman, Ph.D., *Associate Professor of Geography*

COURSES OFFERED

BIOLOGY

S.11a	General Biology (Botany)	Potter	Intersession
S.17	General Ecology	Potter	10:30 A.M.
S.19	Human Anatomy and Physiology	Nunnemacher	11:45 and M., W. Labs
S.244	Biochemistry	Rosenkrantz	8:00 A.M.

BUSINESS ADMINISTRATION

S.17	Public Speaking	Letendre	8:00 A.M.
S.129	Federal Income Taxation	Hargest	9:15 A.M.
S.131	Human Relations and Policy Making in Business and Industry (Soc. S.131)	Killian	11:45 A.M.
S.150	Elements of Insurance	Graf	Intersession
S.184	Time and Motion Study	Nordstrom	6:00 P.M., M., W., F.

ECONOMICS

S.13	Money and Banking	Maxwell	8:00 P.M. M., W., F.
S.17	The New England Economy	Melder	Intersession
S.19	Economics of Transporation	Collazzo	10:30 A.M.

EDUCATION

**S.20	Geography in Education	Warman	9:15 A.M. and 3:00 P.M
S.211	Methods and Materials in Character and Citizenship Education	Jones	11:45 A.M.
***S.217	The Use of Community Resources in Teaching	Borger	9:15 to 11:40 A.M.
**S.223	Demonstration of Materials and Methods in Teaching	Shepherd	9:15 to 11:40 A.M.
S.241	Educational Psychology—A Study of the Individual	Jones	9:15 A.M.
***S.261	Management and Administration in the Elementary and Junior High School	Shepherd	9:15 to 11:40 A.M.

ENGLISH

S.11a	Composition and Literature	Anderson	10:30 A.M.
S.12	Public Speaking (B.A. S.17)	Letendre	8:00 A.M.
S.15	Survey of American Literature	Anderson	9:15 A.M.
S.125	The Short Story	Carter	6:00 P.M. M., W., F.
S.126	Modern American and British Drama	Letendre	10:30 A.M.
S.17	Great English Writers	Carter	8:00 A.M.

FINE ARTS

S.122	Introduction to Symphonic Music	Hastings	Intersession
S.195	Introduction to Contemporary Art	Graziani	8:00 P.M. M., W., F.

GEOGRAPHY

S.12	Introduction to Climatology	Warman	Intersession
**S.20	Geography in Education (Ed. S.20)	Warman	9:15 A.M. and 3:00 P.M.
**S.28	The Future of New England	Carlson	8:00 and 9:15 A.M.
S.191	Cartography	Burnham	Intersession and S.S., 10:30 A.M.
S.261	The American City	Murphy	8:00 A.M.
S.298	Map and Aerial Photo Interpretation	Brunnschweiler	Intersession

HISTORY AND GOVERNMENT

S.15b	Introduction to American Government	Bernstein	6:00 P.M. M., W., F.
S.205	Freedom and Communism	Jordan	Intersession
S.215	Western and Central Europe Since 1945	Tobin	11:45 A.M.
S.233	New Viewpoints in American History	Campbell	8:00 A.M.
S.235	The U. S. in the 20th Century	Campbell	10:30 A.M.
S.237	Development of U. S. Foreign Policy Since 1918	Tobin	9:15 A.M.

LANGUAGE

S.115	Man and Language	Reid	11:45 A.M.
*S.12	Intermediate French	To be announced	9:15 A.M. and 3:00 P.M.
*S.14	Readings in French Literature	To be announced	9:15 A.M. and 3:00 P.M.
*S.11	Beginning German	Edwards	8:00 and 11:45 A.M.
*S.12	Intermediate Spanish	To be announced	9:15 A.M. and 3:00 P.M.
*S.14	Readings in Spanish and Spanish American Literature	To be announced	9:15 A.M. and 3:00 P.M.

MATHEMATICS

S.13b	Differential Equations	Stubbe	9:15 A.M.
S.216	Advanced Differential Equations	Stubbe	10:30 A.M.

PHILOSOPHY

S.13	Ethics and the Good Life	Beck	8:00 A.M.
S.121	Classical American Philosophers	Beck	Intersession

PSYCHOLOGY

S.190	Industrial Psychology	Kaplan	8:00 P.M. M., W., F.
S.170	Introduction to Child Psychology	Kaplan	8:00 A.M.
S.234	Psychology of Personality and Interpersonal Relationships	Dembo	Intersession

SOCIOLOGY

S.11b	Analysis of Our Society	Killian	9:15 A.M.
**S.12	Peoples of the World	Morris	2:00 to 4:20 P.M.
S.131	Human Relations and Policy Making in Business and Industry	Killian	11:45 A.M.

*Double Course, two classes daily through summer session.

**Double Course, two classes daily, first three weeks, June 27–July 16.

**Double Course, two classes daily, second three weeks, July 18–August 10.

COURSE OFFERINGS

BIOLOGY

Intersession

F.—BIO.—S.11a GENERAL BIOLOGY—THE PLANT KINGDOM

David Potter, *Professor of Biology*

Introduction to the Fundamentals of Biology as illustrated by the plant kingdom will cover such questions as: evolution, inter-relationships, growth, and distribution of plants and their reaction to the environment. Field work will be included.

Lecture: Monday through Friday, 9:00 A.M.
Lecture-Laboratory: Monday through Thursday, 1:00–5:00 P.M.
Laboratory fee: $10.00. Credit: 3 semester hours.

Summer School

F.—BIO.—S.17 GENERAL ECOLOGY

David Potter, *Professor of Biology and*
Rudolph Nunnemacher, *Associate Professor of Biology*

An introductory study of the distribution of plants and animals, their inter-relationships and adaptations to such a wide variety of environments as the seashore, sand dunes, woodlands, and ponds. Field trips to Mt. Monadnock, the virgin forest at Bradford, N. H., the North Shore, and the Barnstable dunes on Cape Cod will be taken on Saturdays. Previous courses in Biology are helpful but not required. This course should prove equally valuable to students now in college, to teachers of Natural Science, and to others who have a general interest in that field.

Monday through Friday at 10:30; short field trips
Travel and laboratory fee $10.00. or laboratory, Tuesday, 2:00–5:00 P.M.

F.—BIO.—S.19 HUMAN ANATOMY AND PHYSIOLOGY

Rudolph F. Nunnemacher, *Associate Professor of Biology*

A detailed review of the structure, performance, and interrelation of the organ systems of the body. Laboratory exercises with preserved and living material will give emphasis to the form and function of the living body.

Monday through Friday 11:45 to 12:55 P.M.;
Laboratory fee: $10.00. labs. Monday and Wednesday, 2:00–5:30 P.M.

BIO.—S.244 BIOCHEMISTRY

Harris Rosenkrantz, *Visiting Lecturer;*
Staff Member, Worcester Foundation for Experimental Biology

The principles and mechanisms of biochemical reactions in an understanding of the metabolism of foodstuffs and the role of enzymes, vitamins and hormones. An acquaintance with the instrumentation in biochemical research will be presented. The course will include laboratory demonstrations with student participation, field trips to the Worcester Foundation, student seminars and guest lecturers.

Monday through Friday, 8:00–9:10 A.M.

BUSINESS ADMINISTRATION

Intersession

* F.—B.A.—S.150 ELEMENTS OF INSURANCE

Francis O. Graf, *Visiting Lecturer;*
Manager, Conn. General Life Ins. Co.

Emphasis on Life, Accident and Sickness and Group or Employee forms of insurance. A practical and non-technical study and explanation of the principles and practices of the Life, Accident and Health and Group insurance business. The course is primarily designed to acquaint the student in the uses of these forms of insurance, the types of insurance companies and the internal structure of the insurance business in terms of job evaluation and possibilities. Lectures will include guest speakers, and several field trips to Home Offices of insurance companies are to be arranged.

Monday through Friday, 8:00–10:45 A.M.

Summer Session

B.A.—S.17 PUBLIC SPEAKING

Donald H. Letendre, *Assistant Professor of English*

For course description see section on English.

* B.A.—S.129 FEDERAL INCOME TAXATION

George E. Hargest, *Associate Professor of Business Administration*

A basic course in Federal Income Taxation dealing with the laws and regulations as they apply to individual persons. Consideration is given a series of practical problems covering concrete situations designed to illustrate the meaning of the law as it applies to the taxpayer. Practice is provided in the preparation of returns.

Monday through Friday, 9:15–10:25 A.M.

B.A.—S.131 HUMAN RELATIONS AND POLICY MAKING IN BUSINESS
(Soc.—S.131) AND INDUSTRY

Frederick W. Killian, *Associate Professor of Sociology*

This is a study of the human use of human beings in the field of business and industry. Of the recent findings of the social sciences as they pertain to this area of work and life. Of the relations of business and industry to the family, law, religion and other institutional operations. Basic sociological and social psychology concepts and ideas will be applied to the analysis of cases. Emphasis is placed on the study of cases (actual experiences in the operation of business and industry) by student participation in reporting and analyzing cases and of the analysis of the cases by applying social concepts to them. A book of cases in the field will be used which combines the cases with the fundamental ideas necessary for their analysis.

(Not a substitute for Industrial Sociology in the academic year.)

Counted as a course for the sociology major in the academic year. Also counted as a business course for the B.B.A. degree. Open by permission of the instructor.

Monday through Friday, 11:45–12:55 P.M.

*B.A.—S.184 TIME AND MOTION STUDY

(Evening) Joseph A. Nordstrom, *Assistant Professor of Business Administration*

A grounding in the theory and practices of Time Study and Motion Study. The application of time study to the setting of wage rates and to other industrial uses

*- Not acceptable for credit toward A.B. degree.

will be considered. The M. T. M. time study methodology and the Work Simplification approach to methods study will both receive some emphasis. In addition to lecture work, this course will also include some laboratory practice in the principles involved.

Evenings: Monday, Wednesday and Friday, 6:00–7:50 P.M.

Economics

Intersession

EC.—S.17 THE NEW ENGLAND ECONOMY

F. Eugene Melder, *Associate Professor of Economics and Sociology*

A brief intensive study of the economic endowment, development and activity of the New England region. Students will examine the internal and external trade and economic relationships of the region through the analysis of the present and potential developments. Special topics on selected industries will be treated as time permits. The outlook for the region in the national economy will be given attention.

Monday through Friday, 9:00–10:10 A.M. and 3:00–4:10 P.M.

Summer Session

EC.—S.13 MONEY AND BANKING

(Evening)

James A. Maxwell, *Professor of Economics*

The principles of money and banking; characteristics of the American monetary and banking system; theoretical relations of money, prices, income.

Evenings: Monday, Wednesday and Friday, 8:00–9:50 P.M.

EC.—S.19 ECONOMICS OF TRANSPORTATION

Charles J. Collazzo, Jr., *Assistant Professor of Business Administration*

A study of the development of the transportation system of the United States; its contemporary structure, importance, and economic aspects; the development of public control. Railway rate making and standards therefor; railway combinations and proposals for consolidation; railway labor problems.

Monday through Friday, 10:30–11:40 A.M.

Education

Summer Session

**ED.—S.20 GEOGRAPHY IN EDUCATION

Henry J. Warman, *Associate Professor of Geography*

For course description see section on Geography.

ED.—S.211 METHODS AND MATERIALS IN CHARACTER AND CITIZENSHIP EDUCATION

Vernon Jones, *Professor of Educational Psychology*

An intensive study of procedures and materials in education for ethical and citizenship development of children and youth. The first three weeks of the course will run on a workshop basis, during which time special attention will be devoted to the methods and materials developed by such special investigations as the Citizenship Education Project of Columbia University.

**Double course, 2 classes daily, first three weeks, June 27 through July 16.

The second three weeks will be devoted to many other programs developed at the "grass roots" level. Attention will be given not only to curricular and extra-curricular activities of the school but also to possible inter-relations between the schools and other institutions and agencies in the community. Students wishing to prepare materials for use in their own classes will be given all possible assistance.

Monday through Friday, 11:45–12:55 P.M.

***ED.—S.217 THE USE OF COMMUNITY RESOURCES IN TEACHING

Henry C. Borger, Jr., *Associate Professor of Education*

Any community has resources that can be used to develop in students a fuller appreciation of the immediate world in which they live and to help them ultimately become better members of that or any other community. This course represents an organized effort to bring students and teachers into contact with historical and geographic backgrounds, cultural groups, agencies, housing developments, industrial and labor organizations in the Worcester area. The main emphasis will be in the social studies but other fields will be explored according to the needs of the class.

Field trips, guest speakers, films and other audio-visual materials will be the principal means used to develop the course.

Double course meeting twice daily at 9:15 to 11:40 A.M. and afternoons for field trips for the second half of the Summer Session, July 18 to August 10.

ED.—S.241 EDUCATIONAL PSYCHOLOGY—A STUDY OF THE INDIVIDUAL

Vernon Jones, *Professor of Educational Psychology*

A survey of some of the main principles underlying the understanding of children and youth in school. Attention will be given to case studies and the methods of analysis and guidance in the areas of abilities, interests, personality and conduct. Problems submitted by students will receive special attention.

Monday through Friday, 9:15–10:25 A.M.

**ED.—S.223 A DEMONSTRATION IN METHODS AND MATERIALS IN TEACHING

Dayton D. Shepherd, *Visiting Lecturer;*
Principal, *Durham School*

A course in which modern methods and materials in teaching will be demonstrated with a class of children in the middle grades. Attention will be given to several methods including particularly the experience unit. Demonstration will also be given of classroom grouping and methods of management and instruction with such groupings. Both theory and practice will be considered and students will find applications both to elementary and to high school teaching.

A double course during the first three weeks of the Summer Session, June 27 through July 16.

Monday through Friday, 9:15–11:40 A.M.

**Double course, 2 classes daily, first three weeks, June 27 through July 16.

***Double course, 2 classes daily, second three weeks, July 18 through August 10.

***ED.—S.261 MANAGEMENT AND ADMINISTRATION IN THE ELEMENTARY AND JUNIOR HIGH SCHOOL

Dayton D. Shepherd, *Visiting Lecturer;*
Principal, Durham School

A study of the problems of classroom and school management in relation both to the teacher and the administration. A suitable course for those who expect to become teaching or supervising principals. It would also be a worth-while course for those who want to study the teacher's relationship and responsibility to the administration. Special emphasis will be given to such practical problems as grouping, differential assignments, class and school discipline, class and school morale, evaluation and promotion, co-curricular responsibilities, and teacher-parent relationships.

A double course during the second three weeks of the Summer Session, July 18 through August 10.

Monday through Friday, 9:15–11:40 A.M.

English

Summer Session

F.—ENG.—S.11a ENGLISH COMPOSITION AND LITERATURE

Karl O. E. Anderson, *Associate Professor of English*

The purpose of English 11 is to develop clarity and accuracy in reading and writing. After a short review of the principles of rhetoric, the course will be devoted to the study of expository essays and short stories. Themes and individual conferences. This course, together with English 11b, is a requirement for the Clark A.B.

Monday through Friday, 10:30–11:40 A.M.

F.—ENG.—S.12 PUBLIC SPEAKING

Donald H. Letendre, *Assistant Professor of English*

A course in the fundamentals of public speaking, emphasizing both the composition and delivery of the most common types of speeches, such as introductory, expository, and impromptu speeches. Special attention will be given to problems of human relations, voice tests, vocabulary development, and the acquisition of self-confidence, poise, and effective communication techniques. Practice speeches, conferences, and voice recordings to enable the student to recognize and correct his speech deficiencies.

Monday through Friday, 8:00–9:10 A.M.

ENG.—S.15 SURVEY OF AMERICAN LITERATURE

Karl O. E. Anderson, *Associate Professor of English*

This course will be devoted to the study of the major American writers of the nineteenth century, from the beginnings of a native literature in Bryant, Cooper, Irving, and Poe, through the flowering in Emerson, Thoreau, Hawthorne, Melville, and Whitman, to late nineteenth century figures such as Twain, Dickinson, and Henry James. Field trips to literary landmarks in Concord, Sudbury, and Cambridge will be included.

Monday through Friday, 9:15–10:25 A.M.

***Double course, 2 classes daily, second three weeks, July 18 through August 10.

ENG.—S.125 THE SHORT STORY

William H. Carter, *Assistant Professor of English*

This course involves the intensive reading of a wide range of stories which exemplify a variety of fictional methods, affording the student some knowledge of the history of this literary type. The primary aim is to help the student develop an appreciation of the broadly human values implicit in the short story.

Evenings: Monday, Wednesday and Friday, 6:00–7:50 P.M.

ENG.—S.126 MODERN AMERICAN AND BRITISH DRAMA

Donald H. Letendre, *Assistant Professor of English*

A survey of the development of modern drama, stressing play structure, the main types of drama, and various experimental techniques in contemporary plays. Shaw, Barrie, O'Neill, Eliot, and Williams will be studied as key figures. Critical reading and discussion, recordings of contemporary plays, and, for those who wish, the opportunity to write an original one-act play.

Monday through Friday, 10:30–11:40 A.M.

G.E.—S.17 ~~GREAT ENGLISH WRITERS~~

~~William H. Carter, *Assistant Professor of English*~~

~~The emphasis in this course is placed, not on tracing literary movements or studying literary problems as such, but on discovering what six great English writers—Shakespeare, Milton (minor poems), Swift, Dickens, Browning, and Hardy—have to say that is of interest or importance to the general reader today.~~

Monday through Friday, 8:00–9:10 A.M.

Fine Arts

Intersession

F.A.—S.122 AN INTRODUCTION TO SYMPHONIC MUSIC

Edward N. Hastings, *Lecturer, Clark University Evening College*

This course is designed to give the student a better understanding of symphonic music by tracing its development from the time of Bach to the present. In addition to the study of representative orchestral works by Bach, Haydn, Mozart, Beethoven, Brahms, Mendelssohn, Liszt and Wagner, the course will include a general study of the makeup and development of the modern symphony orchestra and an introduction to score-reading. Students will be expected to spend at least one hour daily outside of class listening to recordings of the works to be discussed. Satisfies Fine Arts requirement.

Monday through Friday, 9:00 A.M. and 3:00 P.M.

Summer Session

F.A.—S.195 INTRODUCTION TO CONTEMPORARY ART

(Evening)

Sante Graziani, *Visiting Lecturer;*
Head of School, Worcester Art Museum

Study of basic ways and means for forming and understanding contemporary works in art and design. Illustrated lectures and criticisms of experiments done with simple materials in black and white and in color. Work in line, shape, pattern, volume, color, and space in drawing and painting. No previous formal training is required for the beginner. A review of fundamental ideas for the advanced student and professional worker in the field of advertising and industrial design, and teaching. Satisfies Fine Arts requirement.

Evenings: Monday, Wednesday and Friday, 8:00–9:50 P.M.

Geography

Intersession

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Given

~~GEO.—S.12 INTRODUCTION TO CLIMATOLOGY~~

~~Henry J. Warman, *Associate Professor of Geography*~~

~~Elements of meteorology and climatology with practical exercises. Emphasis on most recent theories; explanation of distribution of types of climate and weather.~~

~~Monday through Friday, 9:00 A.M. and 1:30 P.M.~~

F.—GEO.—S.191 CARTOGRAPHY

Guy H. Burnham, *Instructor in Geography*

May be taken during the intersession by special arrangement with the instructor. For description, see below.

GEO.—S.298 MAP AND AERIAL PHOTO INTERPRETATION

Dieter Brunnschweiler, *Assistant Professor of Geography*

The use of maps and photographs in regional and systematic geography is explained. Special emphasis will be placed on the study of the New England landscape which will be visited in several field trips thus combining laboratory with field work.

Monday through Friday, 9:00 A.M. and 1:30 P.M.

Summer Session

**GEO.—S.20 GEOGRAPHY IN EDUCATION

Henry J. Warman, *Associate Professor of Geography*

A survey of geography in the present-day American school system, designed to meet the needs of those expecting to teach geography. Techniques of teaching geography will be stressed in afternoon sessions.
(1st class meeting will be at 1:30 June 27.)

Double course meeting twice daily at 8:00–9:10 A.M. and 1:30 P.M.
for first half of summer session, June 27 through July 16.

***GEO.—S.28 THE FUTURE OF NEW ENGLAND

Albert S. Carlson, *Visiting Lecturer;*
Professor of Geography, Dartmouth College

This course will describe present conditions and future trends in all phases of the economic life of New England. Each class period will be divided into a presentation of general conditions and description of particular situations designed to improve the student's ability to analyze and evaluate (a) the part that geographic conditions play in determining the industrial structure of the region and (b) how local regions and individual industries take advantage of their geographic conditions to operate profitably.

**Double course, 2 classes daily, first three weeks, June 27 through July 16.
***Double course, 2 classes daily, second three weeks, July 18 through August 10.

A thorough study of key regions and industries will be made in relation to New England and national conditions. Wide use of business, government and professional journals will be made to find the answers along with student reports, field trips and lectures.

A double course during the second three weeks of the Summer Session, July 18 through August 10.

Monday through Friday, 8:00–10:25 A.M.

F.—GEO.—S.191 CARTOGRAPHY

Guy H. Burnham, *Instructor in Geography, Cartography*

A discussion of various graphic methods and their application to geographic data. Since emphasis will be placed upon the mastery of cartographic tools and instruments, this course should prove particularly helpful to those planning to enter government service or to do illustrative work. This course may be taken for double credit or during the intersession by special arrangement with the instructor.

Monday through Friday, 10:30–11:40 A.M. and afternoon workshop.

GEO.—S.261 THE AMERICAN CITY

Raymond E. Murphy, *Professor of Economic Geography*

The principles of urban geography with particular emphasis upon the American city, as the central theme. Special consideration will be given to the geographer's approach to the many problems now facing urban centers today; how some communities are solving them through city planning.

Monday through Friday, 8:00–9:10 A.M.

History

Intersession

HIST.—S.205 FREEDOM AND COMMUNISM

H. Donaldson Jordan, *Professor of English History*

The challenge of Communism will be considered in terms of the conflicting political ideologies that have developed since the French Revolution. Examination of liberal democracy will attempt to throw light on its assets and liabilities in withstanding the threat of totalitarianism.

Monday through Friday, 9:00 A.M. and 3:00 P.M.

Summer Session

HIST.—S.215 WESTERN AND CENTRAL EUROPE SINCE 1945

Irwin M. Tobin, *Visiting Lecturer;*
Labor Attaché, American Embassy, Vienna, Austria

This course will trace the recovery of the major nations of Western Europe in the post-war decade; the problems of Central Europe, notably Germany and Austria, especially as they relate to the East-West division from which Europe still suffers; and efforts towards European unity through the Organization for European Economic Cooperation, the Iron and Steel Community, the Council of Europe, and NATO.

Monday through Friday, 11:45–12:55 P.M.

History and Government

Summer Session

GOV.—S.15b INTRODUCTION TO AMERICAN GOVERNMENT

(Evening)

Marvin D. Bernstein, Ph.D., *Visiting Lecturer;*
Instructor, Worcester State Teachers College

A study of the functioning of the government of the United States with emphasis on contemporary problems of the federal government.

Evenings: Monday, Wednesday and Friday, 6:00–7:50 P.M.

HIST.—S.233 NEW VIEWPOINTS IN AMERICAN HISTORY

Robert F. Campbell, *Associate Professor of American History*

Particularly designed for secondary school teachers of history and the social sciences, this course will, through readings and discussion, concern itself with some of the recent literature in the field of American history, especially in those areas where new interpretations or points of view have been expressed. Among the topics discussed will be: The Puritans; The Confederation Period; The Age of Jackson; The Causes of the Civil War; The Age of Enterprise; The Progressive Movement; American Foreign Policy since 1900; and Recent Biographical Literature.

Monday through Friday, 8:00–9:10 A.M.

HIST.—S.235 THE UNITED STATES IN THE TWENTIETH CENTURY

Robert F. Campbell, *Associate Professor of American History*

This course will deal with the chief economic, political, and social developments in the United States since 1900, with emphasis upon the emergence of the United States as a world power. Note: This course will be open to qualified Sophomores with the permission of the instructor.

Monday through Friday, 10:30–11:40 A.M.

HIST.—S.237 DEVELOPMENT OF THE U. S. FOREIGN POLICY SINCE 1918

Irwin M. Tobin, *Visiting Lecturer;*
Labor Attaché, American Embassy, Vienna, Austria

A survey of the major stages in the evolution of American foreign relations since World War I: the eras of isolationism, involvement in World War II, and postwar assumption of world wide responsibilities. The course aims to provide a framework for understanding contemporary problems of foreign policy in the atomic age, the U. S. government organization for the conduct of foreign relations.

Monday through Friday, 9:15–10:25 A.M.

LANGUAGES

Summer Session

G.E.—S.115 MAN AND LANGUAGE

J. Richard Reid, *Associate Professor of Romance Languages*

An introduction to the analysis of the nature and function of human language: its role in the life of individuals and societies.

This course will deal with such problems and questions as: What is language? What is the relation between language and thought? Does our language partially determine how we perceive the world? Why do languages change, and how? Is communication the primary function of language? How does language bind social groups together? How are the world's languages related to each other? Why don't we have a world language?

This course is designed (1) for the general student who wishes to know more about the nature of the uniquely and universally human institution of language; (2) for the student of such fields as psychology, sociology, anthropology and philosophy who wishes to explore the importance of language to his own field; and (3) for the student or teacher of English or foreign languages who is interested in the ways in which his field bears upon other areas of life and knowledge.

There are no specific prerequisites. Some experience with a foreign language or some background in any of the fields of psychology or social science will, of course, be an advantage.

Lectures: Tuesday and Friday, 11:45–12:55 P.M.
Seminar meetings: Monday and Thursday, 2:30– 4:15 P.M.

French

***F.—FR.—S.12 INTERMEDIATE FRENCH**

Messrs. King + Nicol
~~Instructor to be announced~~

This course aims to develop all the fundamental skills—pronunciation, conversation, grammar, reading—necessary as a basis for any effective use of the language. The approach will be conversational insofar as practicable. Carefully graded readings will be chosen primarily for affording insights into the culture of France. Open to students who have had the elements of French in a first-year college course or the equivalent. Indivisible course.

Monday through Friday, 9:15–10:25 A.M. and 3:00–4:10 P.M.

~~***F.—FR.—S.14 READINGS IN FRENCH LITERATURE**~~

~~Instructor to be announced~~

~~A third-year course, designed first to perfect the student's techniques of reading, and second to give an understanding of a number of French works of universal importance and appeal. Open to students who have had a second-year college French course or the equivalent.~~

~~Monday through Friday, 9:15–10:25 A.M. and 3:00–4:10 P.M.~~

German

***F.—GER.—S.11 INTRODUCTORY GERMAN**

James S. Edwards, *Assistant Professor of German*

The regular first year course in German. Study of pronunciation, vocabulary, elements of grammar, composition, and the reading of modern German prose. *This course will demand the full time of the student.* No auditors.

Double course: Monday through Friday, 8:00–9:10 A.M. and 11:45–12:55 P.M.

Spanish

***F.—SP.—S.12 INTERMEDIATE SPANISH**

Helen Agby
~~Instructor to be announced~~

This course aims to develop all the fundamental skills—pronunciation, conversation, grammar, reading—necessary as a basis for any effective use of the language.

*Double course, 2 classes daily through summer session.

The approach will be conversational insofar as practicable. Carefully graded readings will be chosen primarily to afford some insights into Hispanic culture, of both Spain and Spanish America. Open to students who have had the elements of Spanish in a first-year college course or the equivalent. Indivisible course.

Monday through Friday, 9:15–10:25 A.M. and 3:00–4:10 P.M.

*F.—SP.—S.14 READINGS IN SPANISH AND SPANISH AMERICAN LITERATURE

Instructor to be announced

A third-year course designed first to perfect the student's techniques of reading, and second to give an understanding of a number of works of universal importance and appeal. The first half will be devoted to Spanish America, the second half to Spain. Open to students who have had a second-year college Spanish course or the equivalent.

Monday through Friday, 9:15–10:25 A.M. and 3:00–4:10 P.M.

Manuel Duran

Mathematics

Summer Session

MATH.—S.13b DIFFERENTIAL EQUATIONS

John S. Stubbe, *Associate Professor of Mathematics*

This course includes discussion of ordinary differential equations, with emphasis on the principal types of first and second order equations. Applications to geometry, physics, chemistry, and mechanics are stressed. The course is a continuation of the first course in calculus.

Prerequisite: A year course in calculus.

Monday through Friday, 9:15–10:25 A.M.

~~MATH.—S.216 ADVANCED DIFFERENTIAL EQUATIONS~~

~~John S. Stubbe, *Associate Professor of Mathematics*~~

~~Some partial differential equations of mathematical physics, Fourier series and boundary value problems, systems of ordinary differential equations are studied.~~

~~Prerequisite: A course in mathematics beyond the first course in calculus. Although it is better for a student to have had advanced calculus before entering this course it is possible for a good student to take this course concurrently with S.13b.~~

~~Monday through Friday, 10:30–11:40 A.M.~~

Philosophy

Intersession

PHIL.—S.121 CLASSICAL AMERICAN PHILOSOPHERS

Robert Beck, *Assistant Professor of Philosophy*

Study and discussion of selections from the writings of the six classical American philosophers: C. S. Peirce, William James, Josiah Royce, John Dewey, Alfred North Whitehead, George Santayana. Various aspects of their thought will be examined and compared, and their relation to the Americanism of their times will be noted. (No prerequisites.)

Monday through Friday, 9:00 A.M. and 3:00 P.M.

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*Double course, 2 classes daily through summer session.

Summer Session

PHIL.—S.13 ETHICS AND THE GOOD LIFE

Robert Beck, *Assistant Professor of Philosophy*

A study of the chief moral problems of modern living and an examination of the major ethical systems in terms of which these problems are and may be resolved. (No prerequisites.)

Monday through Friday, 8:00–9:10 A.M.

Psychology

Intersession

~~PSY.—S.234 PSYCHOLOGY OF PERSONALITY AND INTERPERSONAL RELATIONSHIPS~~

~~Tamara Dembo, *Associate Professor of Psychology*~~

~~A Seminar centering around the nature of personality and relations among people. Stress will be placed on the organization of the needs, values and activities of the person in relation to his social and physical environment.~~

~~Monday through Friday, 9:00–10:10 A.M. and 3:00–4:10 P.M.~~

Summer Session

PSY.—S.190 INDUSTRIAL PSYCHOLOGY

(Evening)

Bernard Kaplan, *Lecturer in Psychology*

A course dealing with the psychological factors underlying the interaction of individuals in their everyday working activities. Stress will be placed on social-psychological factors in the development of attitudes and values, conflicts in attitudes and values among different occupational groups, psychological factors in the maintenance and breakdown of industrial morale, etc. The use and abuse of psychological tests in industry will also be discussed.

Monday, Wednesday and Friday, 8:00–9:50 P.M.

PSY.—S.170 INTRODUCTION TO CHILD PSYCHOLOGY

Bernard Kaplan, *Lecturer in Psychology*

A course dealing with the development of the child from infancy to adolescence. Major stress will be placed on how the normal infant, with almost infinite potentialities, learns to adopt the specific ways of seeing, thinking and feeling which typify members of the particular society in which he is brought up. The essential role of language and play activity in the process of growing up will also be discussed. Some consideration will be given to exceptional children, supernormal, subnormal and abnormal.

Monday through Friday, 8:00–9:10 A.M.

Sociology

Summer Session

F.—SOC.—S.11b ANALYSIS OF OUR SOCIETY

F. W. Killian, *Associate Professor of Sociology*

This is an introductory course in understanding the society in which we live. How this system of customs, conventions, relationships has begun, grown and developed. It is a study of the framework of order and of institutions in which we find our needs and satisfactions and in which we relate to other people through status, playing roles, moving towards goals and interests. It is a study of the relationships between these goals, interests, values and conventions. The emphasis will be on the selected writings of the men who have made the study of sociology. We shall discuss the present situation of man and his possible destiny and the ways he can control that destiny. Also the human use of human beings.

Equivalent to Sociology 11b (second semester in the academic year).

Monday through Friday, 9:15–10:25 A.M.

SOC.—S.131 HUMAN RELATIONS AND POLICY MAKING IN BUSINESS (B.A.—S.131) AND INDUSTRY

F. W. Killian, *Associate Professor of Sociology*

The course description is given under Business Administration.

Monday through Friday, 11:45 A.M.–12:55 P.M.

***SOC.—S.12 PEOPLES OF THE WORLD

Albert Morris, *Visiting Lecturer;*
Chairman, Department of Sociology and Anthropology, Boston University

An introductory course in Cultural Anthropology designed to acquaint students comparatively with a selection of peoples and cultures different from our own as an aid to objective analysis of contemporary society and as a basis for useful generalizations about human social behavior.

Monday through Friday, 2:00–4:20 P.M.

***Double course, 2 classes daily, second three weeks, July 18 through August 10.

APPLICATION FOR ADMISSION

Students desiring to attend the 1955 session of the Clark University Summer School should fill in the form below. Veterans should apply in the same manner as non-veterans.

To the Director of the Clark University Summer School: Date:

I wish to enroll as a student in the Summer School for 1955.

Miss
Mrs. .... (PLEASE PRINT)
Mr. Last First Middle

Permanent Address ....
Street City State

Address at Clark ....

Name of nearest relative ....

Address of nearest relative ....

College attended or attending .... Class ....

Degree sought .... Degrees attained ....

I would like a dormitory room. ☐ If so, please enclose $10.00 deposit.

Previous student at Clark: Yes ☐; no ☐

Veteran: Yes ☐; no ☐ P.L. 346 ☐ P.L. 550 ☐

Field of major interest ....

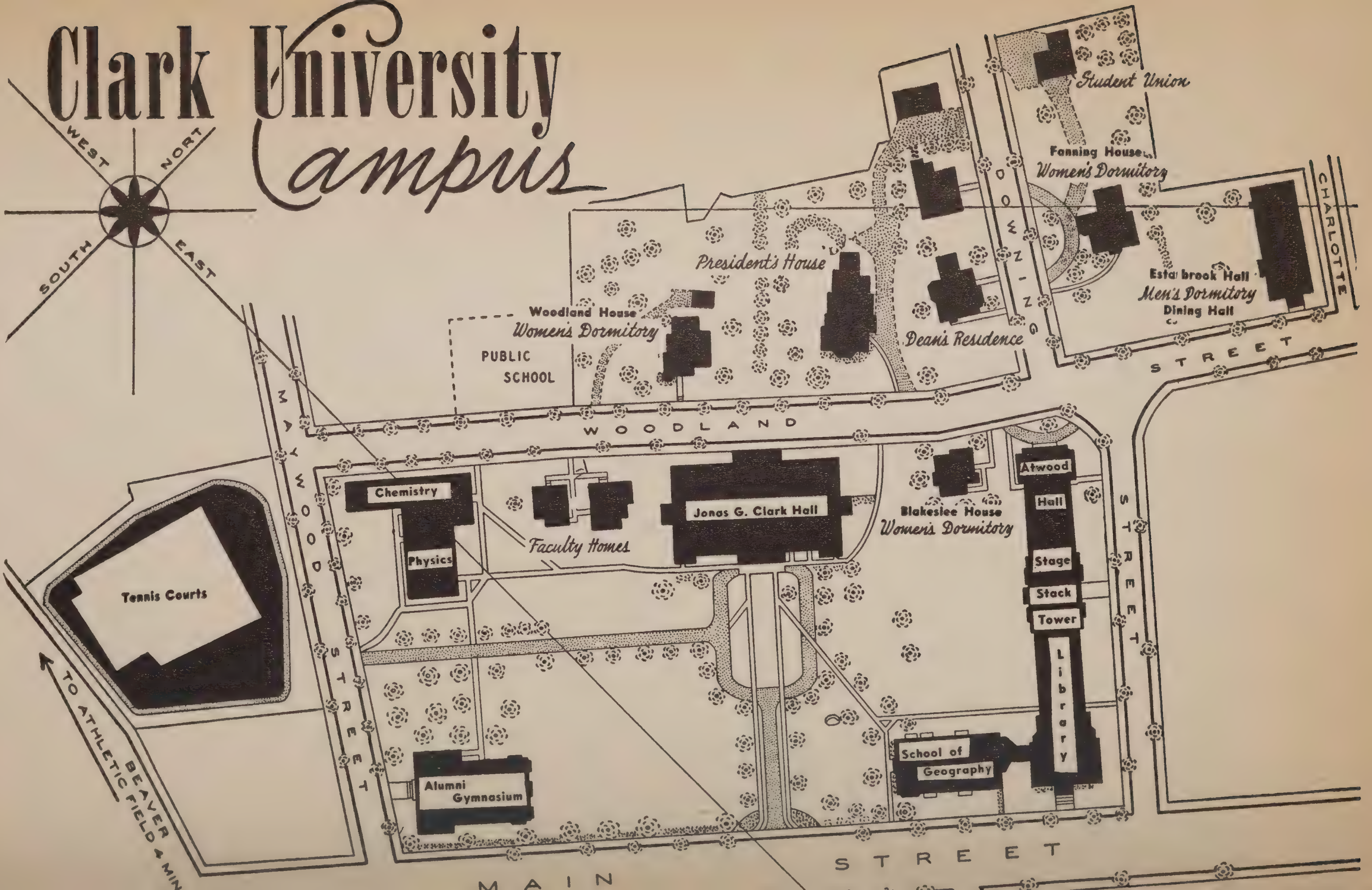
Courses tentatively selected:

	Subject	*Number*	*Title*	*Hours*
(Sample)	Math.	S.13b	Differential Equations	9:15 A.M.

FOR FURTHER INFORMATION ADDRESS

Dr. R. F. Nunnemacher, *Director of the Summer School*
Clark University, Worcester 10, Massachusetts

Clark University Campus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JUNE 6 — INTERSESSION — JUNE 25

Classes Meet Daily, Monday through Friday—9:00 to 10:10 A.M. and 3:00 to 4:10 P.M.—3 Credits

Bio.	S.11a	Gen. Biology (Botany)	Geo.	S.12	Intro. to Climate	Phil.	S.121	Classical American Philosophers
BA.	S.150	Elements of Insur. (8:00–10:25)	Geo.	S.191	Cartography	Psy.	S.234	Personality and Interpersonal Relationships
Econ.	S.17	The New England Economy	Geo.	S.298	Aerial Photo Interpretation			
FA.	S.122	Intro. to Symphonic Music	Hist.	S.205	Freedom and Communism			

JUNE 27 — SUMMER SESSION — AUGUST 10

Morning Classes Meet Daily Monday through Friday—3 Credits

8:00 to 9:10	Bio.	S.244	Biochemistry	Hist.	S.233	New Viewpts. in Am. Hist.
	Eng.	S.12	Public Speaking	Phil.	S.13	Ethics and the Good Life
	GE.	S.17	Great Eng. Writers	Psy.	S.170	Intro. to Child Psychology
	Geo.	S.261	The American City			
9:15 to 10:25	BA.	S.129	Federal Income Taxation	Hist.	S.237	U. S. For. Pol. Since 1918
	Ed.	S.241	Educational Psychology	Math.	S.13b	Differential Equations
	Eng.	S.15	Survey of Am. Literature	Soc.	S.11b	Analysis of our Society
10:30 to 11:40	Bio.	S.17	General Ecology	Geo.	S.191	Cartography
	Ec.	S.19	Econ. of Transportation	Hist.	S.235	U. S. in the 20th Century
	Eng.	S.11a	English Comp. and Lit.	Math.	S.216	Adv. Different. Equations
	Eng.	S.126	Am. and British Drama			
11:45 to 12:55	Bio.	S.19	Human Anat. and Physiol.	RL.	S.115	Man and Language
	Ed.	S.211	Citizenship Development	BA.	S.131	Human Relations in Bus.
	Hist.	S.215	Europe Since 1945			

Evening Classes Meet Monday, Wednesday and Friday—3 Credits

6:00 to 7:50	BA.	S.184	Time and Motion Study	Gov.	S.15b	Intro. to Am. Govern.
	Eng.	S.125	The Short Story			
8:00 to 9:50	Econ.	S.13	Money and Banking	Psy.	S.190	Industrial Psychology
	FA.	S.195	Intro. to Contemp. Art			

DOUBLE TIME COURSES

Two Class Meetings Monday through Friday

Year Courses—6 Weeks—June 27—August 10
6 Credits

Ger.	S.11	Beginning German	8:00 and 11:45
Fr.	S.12	Intermed. French	9:15 and 3:00
Fr.	S.14	Read. in French Lit.	9:15 and 3:00
Sp.	S.12	Intermed. Spanish	9:15 and 3:00
Sp.	S.14	Read. in Spanish Lit.	9:15 and 3:00

Semester Courses

First 3 Weeks—June 27—July 15—3 Credits

Ed.	S.223	Demonstr. of Teach. Meth.	9:15 and 10:30
Geo.	S.20	Geography in Education	9:15 and 3:00

Second 3 Weeks—July 18—August 10—3 Credits

Ed.	S.217	Com. Resources in Teach.	9:15 and 10:30
Ed.	S.261	Manag. in Elem. and Jr. H.S.	9:15 and 10:30
Geo.	S.28	The Future of New Eng.	8:00 and 9:15
Soc.	S.12	Peoples of the World	2:00 to 4:20

CLARK UNIVERSITY
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Clark University Bulletin

Number 218 February, 1955

General Catalogue

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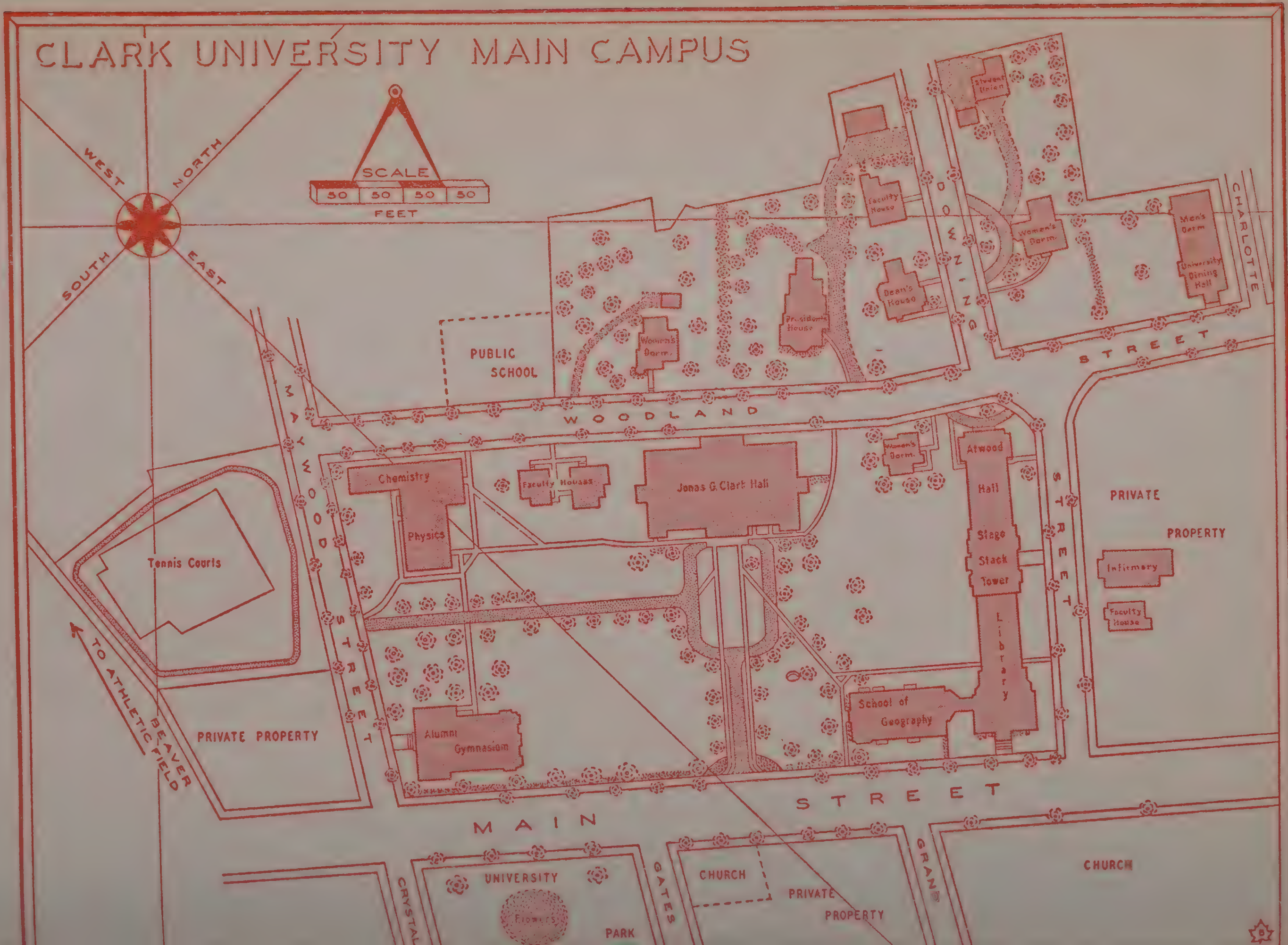
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Clark University Bulletin

Number 218 February, 1955

General Catalogue

A record for the current academic year 1954-1955. Such announcements for the year 1955-1956 as can be made at the time of publication are included. Tuition and other fees are given for the year 1955-1956.

The Bulletin is published in January, February, August, September and October. Entered as second-class matter December 29, 1920, at the Post Office at Worcester, Mass., under the Act of August 24, 1912. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917. Authorized January 24, 1921.

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1955

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Calendar

The academic year begins on the Monday before the fourth Thursday in September and ends on Saturday before the thirty-eighth Monday. It includes two approximately equal semesters and two vacation periods: two weeks including Christmas Day and New Year's, and one week near the first of April.

The first semester ends on the Saturday before the twentieth Monday and the second semester begins on the twentieth Monday of the academic year.

1954-55

First Semester

September 20, Monday. Registration day. Beginning of academic year 1954-55.
October 12, Tuesday. Columbus Day. A holiday.
November 1, Monday. Last day for receiving applications for admission to candidacy for the degree of Doctor of Philosophy in June 1955.
November 11, Thursday. Armistice Day. Not a holiday.
November 13, Saturday. Mid-semester reports.
November 24, Wednesday. Beginning of Thanksgiving recess at close of classes.
November 29, Saturday. End of Thanksgiving recess at 8 a.m.
December 17, Friday. Beginning of Christmas recess at close of classes.

1955

January 4, Tuesday. End of Christmas recess at 8 a.m.
January 11, Tuesday. Registration for second semester. Classes omitted.
January 17, Monday. Beginning of semester examination period.
January 29, Saturday. End of first semester.

Second Semester

January 31, Monday. Beginning of second semester.
February 5, Saturday. Last day for receiving applications for admission to candidacy for the degrees of Master of Arts and Master of Arts in Education in June 1955.
February 22, Tuesday. Washington's Birthday. A holiday.
March 19, Saturday. Mid-semester reports.
April 1, Friday. Beginning of spring recess at close of classes.
April 11, Monday. End of spring recess at 8 a.m.
April 19, Tuesday. Patriot's Day. Not a holiday.
May 9, Monday. Ph.D. dissertations due at Registrar's office, 9 a.m.
May 12, Thursday. Last day for senior comprehensive examinations.
May 16, Monday. A.M. and A.M. in Ed. theses due at Registrar's office at 9 a.m.
May 18, Wednesday. Classes omitted.
May 19, Thursday. Beginning of semester examination period.
May 30, Monday. Memorial Day. A holiday.
June 5, Sunday. Commencement Day.

Summer School, 1955

June 6, Monday. Beginning of intersession. Registration day.
June 27, Monday. Beginning of summer school. Registration day.
July 4, Monday. Independence Day. A holiday.
July 9, Saturday. Classes held.
August 8, Monday. Beginning of summer school examinations.
August 10, Wednesday. End of summer school.

1955 - 6

First Semester

September 19, Monday. Registration day. Beginning of academic year 1955-56.
October 12, Wednesday. Columbus Day. A holiday.
November 1, Tuesday. Last day for receiving applications for admission to candidacy for the degree of Doctor of Philosophy in June 1956.
November 11, Friday. Armistice Day. Not a holiday.
November 12, Saturday. Mid-semester reports.
November 23, Wednesday. Beginning of Thanksgiving recess at close of classes.
November 28, Monday. End of Thanksgiving recess at 8 a.m.
December 16, Friday. Beginning of Christmas recess at close of classes.

1956

January 3, Tuesday. End of Christmas recess at 8 a.m.
January 10, Tuesday. Registration for second semester. Classes omitted.
January 16, Monday. Beginning of semester examination period.
January 28, Saturday. End of first semester.

Second Semester

January 30, Monday. Beginning of second semester.
February 4, Saturday. Last day for receiving applications for admission to candidacy for the degrees of Master of Arts and Master of Arts in Education in June 1956.
February 22, Wednesday. Washington's Birthday. A holiday.
March 17, Saturday. Mid-semester reports.
March 30, Friday. Beginning of spring recess at close of classes.
April 9, Monday. End of spring recess at 8 a.m.
April 19, Thursday. Patriot's Day. Not a holiday.
May 7, Monday. Ph.D. dissertations due at Registrar's office 9 a.m.
May 10, Thursday. Last day for senior comprehensive examinations.
May 14, Monday. A.M. and A.M. in Ed. theses due at Registrar's office at 9 a.m.
May 16, Wednesday. Classes omitted.
May 17, Thursday. Beginning of semester examination period.
May 30, Wednesday. Memorial Day. A holiday
June 3, Sunday. Commencement Day.

September 24, Monday. Registration day. Beginning of academic year 1956-57.

The University

Historical Note
Worcester and the University
Organization
Buildings and Grounds
The Library
Admission
Tuition and Other Charges
Dining Hall
Fellowships, Scholarships and Loans
Placement Bureau

Historical Note

CLARK UNIVERSITY was established as a result of the long-time interest in education and the generosity of Jonas Gilman Clark, a native of Hubbardston in Worcester county and a resident of Worcester from shortly after the Civil War to the time of his death. In founding the University which bears his name Mr. Clark was ably assisted by his wife, Susan W. Clark, and by prominent citizens of Worcester.

The charter of the University was granted by the General Court of the Commonwealth of Massachusetts in 1887. During the ensuing two years buildings were erected and a faculty was assembled. The first students were enrolled in October, 1889.

At that time there existed in the United States, and especially in New England, reasonably ample provision for undergraduate liberal arts education. On the other hand, there was only one institution, The Johns Hopkins University, which placed particular emphasis upon original research and the training of specialists. Under these conditions Clark University performed a unique function in higher education in America by devoting its attention exclusively to graduate study and research from 1889 to 1902.

For president of the new institution, Mr. Clark and the trustees selected Granville Stanley Hall, noted psychologist of Johns Hopkins University. In Worcester President Hall organized a faculty of brilliant scholars who earned an enviable reputation for the University and decisively shaped its character. In 1900, when the Association of American Universities was founded, Clark University was one of the fourteen charter members.

In the fall of 1902, in compliance with the will of Mr. Clark, the trustees established an undergraduate college, Clark College, for young men who sought, in three years' time, "preparation for citizenship and their work in life." The administrative staff and the faculty of the College were distinct from those of the Graduate School.

From the beginning, Clark College departed from the prevailing type of American college of that day. Seriousness of purpose and hard work on the part of undergraduates were demanded. Admission requirements were flexible, but a high standard of performance was enforced. The degree of Bachelor of Arts was granted after three years of study. Student programs were heavier than was common elsewhere. The ideas of Mr. Clark and the trustees were effectively developed in the educational program which was established during the term of office of Carroll Davidson Wright, who had resigned as first United States Commissioner of Labor to serve as President of the College. After the death of President Wright in 1909, Edmund Clark Sanford, Professor of Psychology in the Graduate School was chosen to be President of the College.

In 1920, following the resignation of President Hall of the Graduate School and President Sanford of the College, Wallace Walter Atwood, Professor of Physiography at Harvard University, became president of both the graduate and undergraduate departments of the University. The election of President Atwood marked the addition of geography at both the graduate and undergraduate levels to the instructional obligations of the University. The Graduate School of Geography, with President Atwood as Director, was organized to function within the general framework of the graduate offerings.

Following 1920, significant changes occurred also in the College. The normal period of residence for the degree of Bachelor of Arts was increased from three years to four and participation in intercollegiate activities was encouraged. In 1941, a program leading to the degree of Bachelor of Business Administration was introduced under the supervision of the Division of Business Administration. Also in 1941 the Women's College of Clark University was established by the trustees of the University and women have constituted an integral part of the undergraduate student body since the fall of 1942. The requirements for admission and for a degree are the same for men and women.

In 1946 President Atwood was succeeded by Howard Bonar Jefferson who, at the time of his selection, was Professor of Philosophy and Director of the School of Philosophy and Religion at Colgate University.

President Jefferson undertook to strengthen the liberal arts curriculum of the University, and as a consequence the chapter of Phi Beta Kappa, Lambda of Massachusetts, was established at Clark in February, 1953. Another significant addition to the University's educational services occurred in September of 1953 when the Clark Evening College was established to provide a variety of courses for adults and to offer the Bachelor of Science degree in General Studies and in Business Administration.

Worcester and the University

When plans for the new University were taking shape in Mr. Clark's mind, he enlisted the aid of a group of far-sighted and influential Worcester citizens from whom, later, the majority of his original Board of Trustees was chosen. In this was set a pattern for coöperation between the University and the community which has persisted throughout the history of the institution. The intellectual life of the city has been enriched by the contributions of the faculty and of distinguished guests whom the University has brought to Worcester. Members of the staff have served local institutions both public and private in many ways. The college has opened the door to higher education for hundreds to whom the opportunity would have been denied if they had been forced to seek it elsewhere, while the graduate school has aided the more gifted to proceed to the highest levels of intellectual endeavor. Particularly noteworthy has been the service to teachers in the public school system.

On the other hand, the University has benefited by the support, both financial and intangible, which it has received from the citizens of Worcester. The interchange of services and ideas with the staffs of other Worcester institutions and the opportunity to use their libraries on a reciprocal basis have been invaluable. There is particularly close coöperation between the Department of Fine Arts and the Worcester Art Museum, between the Department of History and International Relations and the American Antiquarian Society, and between the Department of Psychology and the Worcester State Hospital. The Worcester Public Library and the University Library coöperate by avoiding duplication in the coverage of certain subjects and by a corresponding widening of the coverage in the fields assigned to each.

In short, the University is conscious that it is a part of the community and that, as such, it has both obligations and benefits. Its steadfast purpose is to strengthen the pattern of mutual interdependence and cooperation.

Organization

The University includes:

The Graduate School of Geography offering instruction leading to graduate degrees in Geography.

The Graduate School offering instruction leading to the degrees of Master of Arts and Doctor of Philosophy.

The College for Men (Clark College) offering a general college program leading to the degree of Bachelor of Arts and a vocational program leading to the degree of Bachelor of Business Administration.

The College for Women offering a general college program leading to the degree of Bachelor of Arts and a vocational program leading to the degree of Bachelor of Business Administration.

The Undergraduate Division of Business Administration which supervises the program in Business Administration in the undergraduate colleges.

The Evening College offering programs leading to the degrees of Bachelor of Science in General Studies and Bachelor of Science in Business Administration.

The Library, with an endowment separate from the endowment of the teaching branches of the University.

The Clark University Press, associated with the University for the publication of scientific books and journals.

Buildings and Grounds

The University Campus is situated on Main Street about a mile and a quarter from the business center of Worcester. The administrative and educational activities of the University are centered here. On adjacent property facing the campus on Woodland Street, are dormitories, the dining hall, and residences of the President and of the Dean of the College. A small athletic field, opposite the campus on Maywood Street, provides tennis courts and a running track. A larger field, at the corner of Beaver Street and Park Avenue, is used for baseball, soccer, and other sports. The Hadwen Arboretum, the gift of Obadiah B. Hadwen, is a tract of about twenty acres at the intersection of Lovell and May Streets.

The Main Building (Jonas G. Clark Hall), completed in 1889, is a four-story, granite and brick structure containing about ninety rooms. It houses the general academic offices of the University and the offices and classrooms of most of the departments of instruction.

The Science Building, also completed in 1889, houses the Departments of Physics and Chemistry.

The Library Building, completed in 1903, marked a departure from the style of the older buildings. Its design, which has been followed in all of the later University buildings, is a modern adaptation of the Gothic, using brick as the construction material.

The original building, at the corner of Main and Downing Streets, was enlarged in 1910 by the addition of a wing extending along Main Street. Part of this wing is used for library purposes and it houses the Graduate School of Geography, the President's office and the offices of University Development and Public Relations. A second addition to provide for the growing book collections was added to the library in 1939. This is in the form of a tower which connects the Library Building with Atwood Hall.

Atwood Hall has its entrance on Woodland Street and extends along Downing Street to join the library tower. It provides an auditorium with a seating capacity of 800, which is used for weekly college assemblies and other university functions.

THE ALUMNI GYMNASIUM, completed in 1938, is at the corner of Main and Maywood Streets. It provides a playing floor of ample size with seats for 800 spectators. The Gymnasium also contains the offices of the Alumni Secretary and a comfortable lounge which provides a convenient and attractive meeting place for University organizations.

ESTABROOK HALL, at the corner of Woodland and Charlotte Streets, provides dormitory accommodations for men and contains the University Dining Hall.

WOMEN'S DORMITORIES. There are at present four women's dormitories, Fanning, Blakeslee, Woodland, and one recently purchased at 118 Woodland Street, all located on or adjacent to the campus.

The Library

Tilton M. Barron, *Librarian*

Marion Henderson, *Assistant Librarian*

Guy Burnham, *Map Librarian*

As is typical of any institution Clark University Library's collections are a reflection of the history of the institution which they serve. The early library was, as might be expected, primarily a scholar's collection, serving the needs of the men whom President Hall had assembled around him. In 1902 with the founding of Clark College an undergraduate library was established. Though these two collections were later merged to form the present University Library which now amounts to about 210,000 volumes, those classes representing subjects in which no graduate work is offered such as music and the fine arts, language and literature, philosophy and religion are still characteristically undergraduate in content.

The richest collections are of course in those fields in which graduate work is offered: geography, history and international relations, economics, psychology, chemistry, biology, and mathematics.

The psychology collection built up under the guidance of President Hall and to which he willed his own library is one of the best in the country for the period of Dr. Hall's activity. It is particularly rich in early runs of foreign journals.

Particularly noteworthy is the geography collection, assembled under the energetic direction of the late President Atwood and enriched in 1928 by the bequest by the late Col. William Libbey of Princeton, N. J., of his library, one of the finest geography collections in private hands in its time.

The library owns a collection of some 51,000 maps.

Under Mr. Clark's will, his books and paintings together with a fund for their maintenance and increase came to the University. The collections are housed in the library where a part of them are on display in a room set aside for the purpose.

Admission

Four classes of students are accepted in the University:

1. Graduate Students, candidates for the degrees of Master of Arts, Master of Arts in Education, and Doctor of Philosophy.

See the announcements of the graduate schools.

2. Undergraduates, candidates for the degrees of Bachelor of Arts and Bachelor of Business Administration in the Men's College or the Women's College.

3. Special Students, persons not prospective candidates for a degree, who wish to take advantage of the opportunities for study provided by the University and who give satisfactory evidence of adequate preparation for the work which they wish to undertake.

Special students are under the supervision of the College Board.

4. Students in the Summer School and in the Evening College who may or may not be candidates for a degree in Clark University.

Auditors may be admitted at the discretion of the administrative officers of the University. They pay the regular tuition charges but are not enrolled as students in the University and do not pay the matriculation fee.

The University reserves the right to require the withdrawal at any time of any student whose record in either conduct or scholarship fails to meet the expectations implied by his admission.

Inquiries concerning the Graduate School should be addressed to

The Secretary of the Graduate Board,
Clark University,
Worcester 10, Mass.

Inquiries concerning the Colleges should be addressed to

The Director of Admissions,
Clark University,
Worcester 10, Mass.

Inquiries concerning the Evening College should be addressed to

The Director of the Evening College,
Clark University,
Worcester 10, Mass.

Tuition and Other General Charges

Tuition and other charges which apply generally throughout the University are listed below. Charges which apply to particular units of the University are listed with the announcements of the individual units.

Matriculation fee. Each student who is formally enrolled in the University pays the matriculation fee of $5.

This fee is paid but once, even though the student's periods of residence may be interrupted, and entitles the student to receive an official academic record of his performance as a student.

Tuition. The regular tuition charge for both graduate students and undergraduates is $600 for the academic year, September to June. The corresponding charge for each semester separately is $300.

Students who enroll for smaller-than-normal programs of courses (fewer than four courses in the case of undergraduates) are charged at the rate of $120 a year for each course. The corresponding charge for a single semester is $60 for a single course.

One half of the tuition for the year is due and payable on or before the first day of each semester.

Since University commitments are based to a large extent on enrollment and must be entered into at the beginning of the year for the entire year, the following regulation has been adopted by the Board of Trustees of the University:

"No refund of tuition and no release of obligation to pay tuition shall be made because of failure for any reason on the part of a student to complete the work of any semester after it is begun."

Laboratory fees and deposits, dormitory charges, infirmary fees, the activities fee, etc., are listed in the announcements of the Graduate School and of the Colleges. Departmental fees are listed in the announcements of the individual departments.

Tuition and other fees for students in the Summer School and in the Evening College are listed in the special announcements of these activities.

The University Dining Hall

The University Dining Hall is operated for the convenience of all students and the staff of the University.

Undergraduates who do not live at home are required to eat at the Dining Hall. Other members of the University are welcomed on a permanent or temporary basis or for single meals.

Attractive and well-balanced meals are served at a price which is fixed to cover only the cost to the University.

For the academic year 1954-55 the Dining Hall charges are $380. One half of these charges ($190) is due and payable at the beginning of each semester, or on a monthly basis of $47.50 payable on the first day of the following month: October, November, December, January, February, March, April and May.

Fellowships, Scholarships and Loans

Fellowships and scholarships are provided by the University from endowed funds and from other sources. Pecuniary aid to students is available also in the form of grants from a number of special funds. A limited amount of part-time employment is available in the various offices and departments of the University. Frequently, as in the case of departmental assistants, this is of a kind which yields useful experience.

Loans for educational purposes are available from a number of funds which have been created for this purpose.

Many scholarships and educational loans are provided by local sources in communities throughout the nation. Any interested person should address inquiries to school officials, churches, fraternal organizations, chambers of commerce, etc.

Detailed statements and lists of the individual funds may be found in the announcements of "The Graduate Schools" and "The Colleges."

Placement Bureau

The University maintains a Placement Bureau, with offices in Jonas Clark Hall, for the purpose of providing employment information to seniors, graduate students, and alumni. Students seeking employment after graduation are urged to register with the Bureau during the fall of their last year of residence. Credentials which the student places on file should be as complete as possible and carefully prepared since they may be used over an indefinite period to supply information to employers. The Bureau makes available up-to-date information about job openings and schedules interviews between students and representatives of employing firms.

Students who want part-time employment are also invited to make use of the Bureau's services.

The Graduate Schools

The Graduate School

- Admission
- The Degree of Master of Arts
- The Degree of Doctor of Philosophy
- Fellowships, Scholarships and Other Aids
- Tuition and Other Fees

The Graduate School of Geography

The Graduate School

The Graduate School of Clark University offers instruction and facilities for independent study to both men and women.

The following general information concerning the Graduate School applies also to the Graduate School of Geography. Later under the heading "The Graduate School of Geography" there is additional information which applies only to this special branch of graduate activity.

Correspondence concerning the Graduate School should be addressed to:

The Secretary of the Graduate Board,
Clark University,
Worcester 10, Mass.

Programs leading to the degrees of Master of Arts and Doctor of Philosophy are available to qualified holders of a bachelor's degree or others of similar attainments in the following fields:

Chemistry
Economics
Geography
History
International Relations
Psychology

The degree of Master of Arts is offered also in the following fields:

Biology
Education
  (*Master of Arts in Education*)
Physics
Sociology

The departments which are not at present organized to accept candidates for graduate degrees offer numerous courses, in fields other than those named above, which are suitable for inclusion in the programs of graduate students.

Scholarships and fellowships are available for prospective candidates for the degrees of Master of Arts and Doctor of Philosophy respectively.

ADMISSION TO THE GRADUATE SCHOOL

Admission to the Graduate School may be granted only by the Graduate Board on the recommendation of a department.

Application. A prospective applicant should communicate with the department in which he expects to do his major work. If he is encouraged by the department to make application, he will be provided with application blanks. These should be returned to the chairman of the department with an official transcript of undergraduate work, and letters of recommendation from at least two persons who are competent to judge the applicant's qualifications.

In addition, applicants for admission to the graduate school are strongly urged, and may be required, to submit a record of attainment in the Graduate Record Examination, given by the Educational Testing Service, Princeton, New Jersey.

Admission. In granting admission, the Graduate Board may, with the advice of the department, prescribe a minimum period of residence, never less than one year, and other definite requirements, including courses in particular subjects, as prerequisites for a graduate degree. Admission to the Graduate School is granted for entry only at a specified time, and lapses if the student fails to enter at that time. If, after an applicant has entered the University as a regular student, his period of graduate study is broken by more than a year, he must make formal application for reinstatement.

Admission to the Graduate School does not imply admission to candidacy for a degree.

Admission of college seniors to graduate courses. Seniors in the Men's College or the Women's College who rank in the upper third of the senior class may, in exceptional cases, be admitted to courses "primarily for graduate students" provided petitions for admission are approved by the College Board and the Secretary of the Graduate Board.

THE DEGREE OF MASTER OF ARTS

An academic year of full-time study in residence, or its strict equivalent in summer sessions and part-time study, is a minimum requirement for a master's degree. Residence study is broadly defined as graduate work done at Clark University under the immediate personal supervision of at least one member of the university faculty.

A reading knowledge of a foreign language, usually French or German, may be required of candidates for the degree of Master of Arts at the discretion of the major department.

Application for admission to candidacy for a master's degree should be filed with the Secretary of the Graduate Board not later than the first week of the last full semester which the student expects to spend in residence as a candidate for this degree.

Applications will be considered by the Graduate Board when the student has:

1. Completed one semester of full-time graduate work or its equivalent in residence at this university;
2. Obtained the written endorsement of his major department;
3. Paid the diploma fee ($5) and publication fee ($10).

Candidacy for the degree of Master of Arts holds good for three years from the date of admission to candidacy. For satisfactory reasons, candidacy may be extended once for an additional period of three years by vote of the Graduate Board. If the candidacy expires without the degree having been awarded, the diploma and publication fees, less any expenses incurred, are returned.

Course requirements. Each student must meet a minimum course requirement of five courses, or their equivalent in half courses. The program must be approved by the major department. One of the courses may be a research course devoted to the preparation of the thesis.

Thesis. The thesis will be written on a topic in the field of the student's special interest under the supervision of a member of his major department. A copy of the thesis, together with a précis, approved by the supervising instructor, must be deposited in the Registrar's office not later than three weeks before the date of the Commencement at which the degree is to be conferred. A second copy of the thesis, with a copy of the précis must be delivered to the major department. The précis must not exceed seventy-five words in length.

The thesis is deposited by the Registrar in the University Library. The précis is printed by the University in an annual publication.

Each candidate must make a satisfactory record in such written examinations as may be required by the major department, and in a final oral examination by a committee of three or more, two of whom must be members of the Graduate Board.

THE DEGREE OF DOCTOR OF PHILOSOPHY

Only such candidates as give evidence of general proficiency, power of investigation, and high attainments in the special fields in which their major subjects lie will be encouraged to proceed to the degree of Doctor of Philosophy.

Requirements in foreign languages. A prospective candidate for the doctor's degree is advised to prepare himself early for the examinations in the reading of modern foreign languages. Usually the student must pass two language examinations. French and German are normally required; but the Graduate Board may authorize the substitution of another language for one of these, and a student's major department may require additional languages.

A department, under special circumstances and with the approval of the Graduate Board, may permit a student to substitute the following for the usual language requirements: (1) The passing of an examination in either French or German and in addition, certification by the department that the candidate has demonstrated a working knowledge of the language in the departmental program; (2) the satisfactory completion of an additional program of studies in a field related to the major program.

The language examinations are conducted by a committee composed of representatives of the modern language departments and a representative of the student's major department. The results of the language examinations are reported to the Registrar by the language committee; the results of the substitute requirements are reported by the department. A student must fulfill the above requirements before he will be permitted to take the preliminary examination for the degree of Doctor of Philosophy.

Admission to candidacy. Applications for admission to candidacy must be filed not later than November first in any academic year, by students who hope to receive the degree at the end of that academic year.

An application for admission to candidacy will be considered by the Graduate Board when the applicant has:

1. Completed two full academic years of graduate work (or its equivalent in part-time work), one of which must be at Clark University;
2. Passed the required examinations in foreign languages, or completed satisfactorily the substitute program;
3. Passed a preliminary examination in his chosen fields of study;
4. Obtained the written endorsement of his major department;
5. Paid the diploma fee ($25) and publication fee ($30).

Candidacy for the degree of Doctor of Philosophy holds good for three years from the date of admission to candidacy. For satisfactory reasons, candidacy may be extended once for an additional period of three years by vote of the Graduate Board. If candidacy expires without the degree having been awarded, the diploma fee and publication fee, less any expenses incurred, are returned.

Dissertation. A dissertation which is expected to make an original contribution to some special field of knowledge is required of each candidate.

The dissertation approved by the chief instructor, is laid before the examining committee at the final oral examination.

An abstract of the dissertation, not exceeding 600 words in length, and a précis, not exceeding 75 words, both approved by the instructor under whom they were written, are also required.

By March fifteenth preceding the Commencement at which the degree is to be conferred the first, or ribbon, copy of the dissertation, together with two official title pages, an academic history page, the first copy of the abstract and of the précis, each in a form prescribed, must be delivered to the Registrar of the University. At the same time a second copy of the dissertation and of the abstract may be required by the major department.

The Registrar deposits the dissertation and the abstract in the University Library where they remain permanently. A microfilm copy of each dissertation is made by University Microfilms, Incorporated, of Ann Arbor, Michigan, and is available for duplication by them on request. The abstract is printed in *Dissertation Abstracts,* which is widely distributed both in this country and abroad to subscribing libraries and leading abstracting services. The précis is printed in an annual publication by the University.

Final examination. The final examination is oral and lasts for at least two hours; additional written examinations may be given if the major department so directs. The candidate is expected to defend his dissertation and at the discretion of the examining committee, may be questioned on the entire special field of his study. The oral examination is conducted by a committee of at least four members, including the chairman and one other member of the major department, a member of the Graduate Board under whom the candidate has done no work (unless such a member has participated in the preliminary examination of the candidate), and such other members of the Graduate Board as may be duly appointed. The president of the University is authorized to invite any person from within or without the University to be present and to assist in the examination.

GRADUATE FELLOWSHIPS, SCHOLARSHIPS AND ASSISTANTSHIPS

Graduate fellowships and scholarships are provided by the University from endowed funds and from other sources. Pecuniary aid to graduate students is available also in the form of grants from a number of special funds. A limited amount of part-time employment is available in the various offices and departments of the University. Frequently, as in the case of departmental assistants this is of a kind which yields useful experience.

Loans for educational purposes are available from a number of loan funds on terms which are stated under the heading *Loans for Graduate Students.*

Both outright grants and loans for educational purposes are provided in many sections of the United States by local foundations, fraternal organizations, civic groups, etc.

Graduate fellowships and scholarships are available for prospective candidates for the degrees of Master of Arts and Doctor of Philosophy. Appointments are made on the basis of scholarly promise and seniority and on the recommendation of the departments. The number of appointments available in any department varies from year to year. Fellows and scholars are expected to coöperate with the staffs of the various departments, and may by mutual agreement undertake limited responsibilities. They are never called upon to perform services which would interfere with the completion of a full-time program of graduate study.

In a case where assistance in the department, either in research or teaching, is to be a duty of the fellow, an appointment may be designated as a research fellowship or a teaching fellowship. An appointment of this nature is made on the recommendation of the department and with the consent of the applicant.

Application for a scholarship or fellowship should be made before March first to the chairman of the department in which the applicant expects to do his major work. An application, after being endorsed by the department, goes to the Graduate Board for final action.

According to an agreement between the members of the Association of American Universities, elections of fellows and scholars will be communicated on April first, but not before, to each successful candidate.

Stipends for graduate fellowships and scholarships are provided by the following funds:

THE GEORGE FRISBIE HOAR FUND, the gift of Andrew Carnegie in honor of the second president of the Board of Trustees.

THE AUSTIN S. GARVER FUND, a bequest from Austin S. Garver, member of the Board of Trustees from 1908 to 1918.

THE CHARLES H. THURBER FUND, provided by Charles H. Thurber, member of the Board of Trustees from 1913 to 1938 and president of the Board from 1919 to 1937.

THE GEORGE S. BARTON FUND, a bequest from the Honorable George S. Barton of Worcester. The income of this fund is for the benefit of native born citizens of the City of Worcester.

THE ALUMNI ASSOCIATION FUND, provided by alumni who hold the degree of Doctor of Philosophy, is for the benefit of students who are studying for that degree.

Teaching fellowships are available in certain departments. These involve a specified amount of instruction with stipends which vary according to the amount of service agreed upon.

Assistantships are available in several departments. These positions involve a variety of services with stipends to correspond, and usually provide the student with experience which will be useful in his later professional work.

Inquiries concerning any of the above types of appointment should be addressed to the chairman of the department concerned.

AID FOR GRADUATE STUDENTS

Student aid is available from the following funds, with the restrictions noted.

The John White Field Fund established by Mrs. Eliza W. Field to provide for the minor needs of a scholar or fellow.

The Eliza D. Dodge Fund. The income of this fund is granted to graduate students of limited means who are engaged in research work.

The Chester Bland Fund. The income of this fund is preferably used to provide aid to a promising student, either in residence or engaged in research elsewhere under the direction of the department of History and International Relations. It may also be used to defray the expense of visiting lecturers or of departmental research.

The Morton L. "Sonny" Lavine Foundation, a memorial to Lieutenant Lavine of the United States Army, World War II. The income is to be used for the promotion of research in the Department of History and International Relations.

LOANS FOR GRADUATE STUDENTS

Loans are available for graduate students from the funds listed below. These loans bear interest at four per cent per year.

Applications for loans should be made at the office of the Treasurer.

The Mary S. Rogers Scholarship and Loan Fund was established in 1926 for the benefit of students in the Graduate School.

The Sarah M. Thurber Loan Fund was established by the late Dr. Charles H. Thurber, former president of the Board of Trustees as a memorial to his mother.

TUITION AND OTHER FEES

Matriculation fee. This fee, $5.00, is collected from every student before he is formally enrolled in the University. Official academic records are issued to matriculated students only.

Tuition. The regular tuition charge of the University is $600.00 per year, payable in two equal installments, on or before the first day of each semester.

Students who are enrolled for less than a full-time program are charged at the rate of $60.00 per course per semester.

Miscellaneous fees.

Graduate students in geography pay a camp fee, a workroom fee and a classroom-materials fee. Details are given in the announcement of the Graduate School of Geography.

Graduate students taking undergraduate courses pay the same fees and deposits as undergraduates.

Graduate students who use the gymnasium pay a fee of $10 per year.

Dining Hall. The University Dining Hall provides well balanced meals served in attractive surroundings at the rate of $190.00 per semester. For shorter periods and for single meals there is a correspondingly reasonable charge.

The Graduate School of Geography

Samuel Van Valkenburg, Ph.D., Director of the Graduate School of Geography and Professor of Geography

Raymond E. Murphy, Ph.D., Professor of Economic Geography; Editor, *Economic Geography*

Richard J. Lougee, Ph.D., Professor of Physiography

Henry J. Warman, Ph.D., Associate Professor of Geography; Secretary of the Graduate School of Geography

Edward C. Higbee, Ph.D., Associate Professor of Geography

Guy H. Burnham, A.M., Cartographer and Instructor in Geography

Erwin Raisz, Ph.D., Visiting Lecturer on Cartographic Techniques

SPECIAL LECTURERS, 1954-1955

Albert S. Carlson, Ph.D., Professor of Geography, Dartmouth College

Hans Boesch, Ph.D., Chairman, Department of Geography, University of Zurich

F. Kenneth Hare, Ph.D., Chairman, Geography Department, McGill University

Edward Markus, Ph.D., University of Tartu (Estonia)

Homer P. Little, Ph.D., Dean Emeritus, Former Professor of Geology, Clark University

The Graduate School of Geography offers opportunity to properly qualified students for advanced training in geography. The map collection, libraries, and special laboratories for cartography provide unusual facilities for research work in residence. The Staff, composed of specialists in their various fields of geography, must spend part of their time in travel and field studies. While in residence, the staff members offer regular courses of instruction and direct advanced students in research work. Special lecturers, both American and foreign, supplement the regular Staff. Not all courses of instruction are offered each year; many are given in alternate years. All graduate students are encouraged to undertake independent field studies as part of their university work.

GRADUATE WORK IN THE SCHOOL OF GEOGRAPHY

(Please read also the preceding section of this catalogue, under the heading "The Graduate School".)

The degree of Master of Arts

Work is offered leading to the degrees of Master of Arts and Doctor of Philosophy in Geography. Candidates for the master's degree will pass written examinations in at least six of the following fields: physiography, climatology, soils, biogeography, land utilization, economic geography, human geography and cultural geography, regional geography, political geography, and urban geography. The oral examination for the master's degree covers four fields approved by the Staff. The master's degree requires two years except for those whose preparation has been adequate enough in fundamentals to enable them to qualify in less time.

The degree of Doctor of Philosophy

Candidates for the doctor's degree in geography are required to submit superior written examinations, and to pass a general oral examination covering six fields approved by the Staff. This oral examination will be scheduled after the language requirement is fulfilled. In general, a year of work beyond the master's degree should prepare a candidate for the general examination preliminary to his acceptance as a candidate for the doctor's degree and to his concentration work for his dissertation. This year of course work may well include, besides certain advanced courses in geography, related advanced studies in other fields.

Theses and dissertations

The master's thesis must be submitted to the major professor at least three weeks before it is to be deposited with the Registrar. This is necessary since theses must rotate among and receive final approval of all staff members. Doctoral dissertations must be submitted at least four weeks before the completed copies are due at the office of the Registrar. Dissertations must be circulated first and then defended. Since the final copy of dissertations is on special thesis paper, it is requested that candidates submit for staff circulation the next-to-final drafts. Such a procedure facilitates changes before the dissertations are typed in final form.

Attention is called to the fact that all dissertations are now reproduced in full on microfilm. Since maps and other graphic devices in color will not reproduce satisfactorily, it is recommended strongly that such features be done in black and white for the master copies of dissertations.

DISTINCTIVE FEATURES

In addition to its location in a natural setting rich in physical attributes worthy of investigation, the Clark University Graduate School of Geography is within easy access of such research centers as Harvard and Yale Universities, Boston cultural centers and the American Geographical Society in New York.

The Clark Graduate School has become a traditional "port of call" for most professors of geography in this and other countries. Their stays have ranged from one hour to as long as six months or a year. Clark graduate students are invited to, and do, visit with these leaders in the field of geography.

The graduate students are assigned desks and shelves in the Geography Workroom on the first floor. Staff offices are located on the floor immediately above; hence conferences are easily and frequently arranged. Both workroom and classroom have immediate connections with the periodical room and the open shelves of the library. A general conference room where visiting professors are made welcome and where seminars are held is located on the first floor in the Libbey Library.

Each year the workroom group elects its own officers. Management of the workroom activities and publication of *The Monadnock,* which has kept Clark Geography alumni in their many and widespread occupations informed for over thirty years, is the responsibility of the workroom officers.

The professional magazine, *Economic Geography,* is edited by a staff member. Launched at Clark University over a quarter of a century ago, it is the only magazine published in English that specializes in the economic phases of geography.

An outstanding feature of the Graduate School of Geography is the field camp of three weeks' duration at the beginning of the fall term. All resident prospective candidates for graduate degrees in geography are expected to attend the field camp each autumn. The field program includes studies in physiography, land utilization, urban geography and weather, with special training in mapping and other field techniques. Following the return to the campus, about ten days are allowed for the completion of field reports. Formal course work begins on the second Monday after the close of the field camp.

Formal course work in geography ends about May 1st, leaving students free to read and to coordinate their work prior to the examination period.

The Alpha Sigma Chapter of Gamma Theta Upsilon, national geography fraternity, provides professional and social affiliations between graduate and undergraduate geography majors.

SPECIALIZATION

There are certain basic courses that everyone takes, particularly prospective candidates for the master's degree. However, with the increasing complexity of world problems it has become impossible for anyone to be proficient in all phases of geography. Realizing this, candidates for the Doctor's degree are encouraged to specialize. The selection of the specialty depends upon the interests of the student, his choice of courses, and the topic for his dissertation.

STUDENTS' FEES

All geography students in residence must pay, in addition to the general university fees, the camp fee, the workroom fee, and the classroom-materials fee.

The camp fee, determined on a cost basis, varies between $50 and $80, payable to the camp director on or before the first day of camp. The camp fee covers in addition to tuition, board and lodging, transportation, maps, drafting supplies, and the use of meteorological instruments and other equipment for the three weeks' period.

The workroom fee, $5 a semester, is payable to the department November first and March first. It helps to maintain the geography workroom and equipment used by graduate students—alcove desks, files of maps, card catalogue, adding machine, darkroom facilities, drafting tables, and instruments.

The classroom fee, $5 a semester, is payable to the department November first and March first. It is for mimeographing and for the maintenance, in part, of the classroom wall maps and other equipment.

The Undergraduate Colleges

The Colleges
  Admission
  Induction and Registration
  Student Programs
  Requirements for a Bachelor's Degree
  Grades and Examinations
  Honors
  General College Regulations
  Fees and Expenses
  Student Activities
  Scholarships and Loans

The Men's College

The Women's College

The Division of Business Administration

The Undergraduate Colleges

The Men's College, established in 1902, and the Women's College, established in 1942, constitute the undergraduate colleges in Clark University. Financially the two colleges are independent, educationally they operate as a unit.

Requirements for admission and for a degree are identical in the two colleges. The colleges offer educational programs in the field of liberal arts and in the professional field of Business Administration. A special program which combines the essentials of the liberal arts program with basic training in art is offered in cooperation with the Worcester Art Museum.

The liberal arts program emphasizes breadth of training through requirements in each of the principal areas of human culture combined with the intellectual discipline resulting from a moderate degree of concentration in some selected field of special interest. The program, including the offerings made in cooperation with the Worcester Art Museum, possesses a large degree of flexibility permitting adaptation to a wide variety of individual interests. This program leads to the degree of Bachelor of Arts.

The program in business administration is designed to give a training suitable for those who will occupy positions of responsibility in the fields of commerce and industry. A moderate degree of specialization in some field of administration is combined with broad consideration of the principles and techniques of modern business and of the interrelations between business and the society within which it operates. This program leads to the degree of Bachelor of Business Administration.

The Division of Business Administration is the agency which supervises the college program in business administration.

A program leading to the degree of Bachelor of Arts in which the essentials of a liberal education are combined with sound professional foundations in art is offered in cooperation with the Worcester Art Museum. Details of this program are given in the announcement of the Department of Fine Arts.

Information which is of interest to all students in the colleges is given in the succeeding pages, followed by separate announcements of the Men's College, the Women's College and the Division of Business Administration.

Admission

Inquiries concerning admission and requests for blank forms should be addressed to

The Director of Admissions,
Clark University,
Worcester 10, Mass.

Formal application for admission should be made at the earliest possible date.

Each application should be accompanied by the scholastic record of the applicant, and a fee of five dollars. The fee becomes the university "matriculation fee" if the applicant is accepted. It is not returned if he is not accepted. Each application should also include the names and addresses of three responsible persons who are qualified to give information regarding the character and personality of the applicant.

ADMISSION TO THE FRESHMAN CLASS

An application for admission to the freshman class should, if possible, be presented not later than the middle of the applicant's last year in the preparatory school.

The completion of a four-year high school course or its equivalent, including fifteen acceptable units of credit, is normally required for admission to the undergraduate colleges. The term "unit" is understood to mean approximately one quarter of a pupil's normal program for the school year.

An applicant must furnish official records from all preparatory schools which he or she has attended. Records of scholastic aptitude tests and of College Board examinations are always of value and may be required.

The subject matter requirements for admission to the freshman class are as follows:

For the Degree of Bachelor of Arts

Required subjects, 7 units

English (four years)	3 units
**Mathematics* (algebra and geometry)	2 units
†*Foreign language* (in one language)	2 units

Restricted electives, 5 or more units in addition to the required units

Mathematics	1 or 2 units
‡*Foreign language*	1 to 4 units
Social sciences (history, government, civics, economics, etc.)	1 to 3 units
Natural sciences (physics, chemistry, biology, etc.)	1 to 3 units

Free electives, not more than 3 units

Subjects recognized by the applicant's preparatory school in its regular program, at the discretion of the Committee on Admissions.

For the Degree of Bachelor of Business Administration

Required subjects, 8 units

English (four years)	3 units
Mathematics (algebra)	1 unit
†*Foreign language* (in one language)	2 units
Social studies	2 units

Elective subjects, 7 units

Subjects recognized by the applicant's preparatory school in its regular program, at the discretion of the Committee on Admissions.

As many as three of these units may be in "commercial subjects."

Quality Requirements. "Certification" by the principal of the preparatory school in at least thirteen of the fifteen required units is normally necessary for admission without examinations. An exception may be made if the applicant ranks in the upper quarter of the class with which he graduated or if the principal is willing to give a "blanket certification" without consideration of specific subjects. In the latter case the principal accepts complete responsibility for the applicant's success in college.

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*Applicants expecting to specialize in science are advised to present at least three units of mathematics.

†Normally required.

‡A single "beginning unit" in a foreign language is not recognized as an acceptable unit.

Entrance Examinations. Applicants who cannot present the necessary number of certified units should arrange, in consultation with the Director of Admissions, to take examinations which are given by the College Entrance Examination Board. The college will determine in each case what constitutes a satisfactory record in such examinations.

A bulletin of information concerning these examinations may be obtained without charge from the College Entrance Examination Board, P. O. Box 592, Princeton, New Jersey, or, for the far west, from P. O. Box 9896, Los Feliz Station, Los Angeles 27, California. Inquiries should be sent to the Board at least one month in advance of the dates of the examinations, which are scheduled for March 13, May 22, and Aug. 11 in 1955.

ADMISSION WITH ADVANCED STANDING

A student who wishes to enter the college after attending another institution of college grade is required to submit a letter of honorable dismissal, a complete transcript of his, or her, academic record at the institution last attended, and such other information as the Committee on Admissions may request. If admitted, the applicant will be provisionally classified as a freshman, sophomore, junior, or senior and will be permitted to register for a program of studies corresponding to this classification. After a semester in residence with a satisfactory record, appropriate credit for courses of college grade which have been completed elsewhere will be recorded.

A graduate of the three year course of the Worcester Art Museum School may be admitted as a candidate for the degree of Bachelor of Arts with the rank of *junior* in the college. In such cases the usual admission requirements must be met and the general subject-matter requirements of the colleges must be satisfied.

The bachelor's degree will not be conferred upon a student until he has spent at least a year in residence at Clark University, and usually not unless the period of residence includes the two semesters immediately preceding the granting of the degree.

ADMISSION OF SPECIAL STUDENTS

Applicants for admission as special students should address their inquiries to the Dean of Men and should be prepared to supply evidence of qualification for the study which they wish to undertake.

Induction and Registration

INDUCTION PERIOD

All freshmen, both men and women, and all upper-class women who are entering the University for the first time meet for a few days preceding the opening of the academic year in September for an induction period.

Details are given in the announcements of the separate colleges. For the men there is a fee of $15.00 for the two-day induction period. The women have a three-day induction period, and the fee is $20.00.

FACULTY ADVISERS

When a student is admitted to either the Men's College or to the Women's College he or she is assigned to a member of the faculty who advises the student in respect to a program of courses and other matters. At the beginning of the freshman year the advisers are chosen from a limited group of freshman advisers. Later each student is encouraged to select an adviser of his or her own choosing. A change of advisers may be made on formal request addressed to the Dean.

The adviser assists the student in choosing his program of studies and is available at all times for consultation on any matter which the student may wish to discuss with him. Ideally the adviser-student relationship develops into a relationship of mutual regard which frequently endures long after the college course has been completed.

REGISTRATION

Each student is required to register for a detailed program of courses at the beginning of every semester. Official notice is given well in advance of the dates on which registration is required. Failure to register within the period designated involves a charge of one dollar for each day's delay up to a maximum of five dollars.

Changes in registration may be made, with the approval of the student's adviser, for a limited time after the end of the registration period. Later changes involve a formal petition to the College Board.

After the first four weeks of any semester withdrawal from a course normally involves a record of "failure" in the course. An exception to this regulation is made in cases where the withdrawal reduces the student's program from six courses to five.

Student Programs

An undergraduate student normally carries a program of five courses throughout the academic year, September to June, in addition to required physical training. In general it is expected that a course meeting three times weekly will require a minimum of two hours of preparation for each lecture or recitation. Laboratory periods are usually three hours in length.

A student carrying the regular program should, therefore, expect his college work to require from forty-five to fifty hours of his time per week, in addition to the time required for physical training.

College regulations are designed to permit a large degree of freedom in the adjustment of programs of study to individual differences of interest. Even in the freshman year, when the program is largely determined by the degree for which the student is enrolled, each student makes certain individual choices where alternative requirements or free electives are involved. Such choices deserve the most careful consideration since they frequently affect the general pattern of a student's program for the entire four years of the college course.

FRESHMAN PROGRAMS

A freshman must choose his entire program from courses designated as "open to freshmen."

The following programs are required in the freshman year:

For the Degree of Bachelor of Arts

1. *English 11,* Composition and Literature.
2. *A course in a foreign language.*
3. *A course in "Group A,"* science and mathematics.
4. *A course in "Group B,"* social sciences.
5. *An elective.*

   Mathematics 11 must be elected by students who expect to choose a major in Group A. This includes both pre-medical and pre-dental students.

For the Degree of Bachelor of Business Administration

1. *English 11a.* Composition. First semester.

   Business Administration 14b, Business English. Second semester.
2. *Business Administration 10a,* Elements of Distribution. First semester.

   Business Administration 10b, Elements of Production. Second semester.
3. *Business Administration 117,* Principles of Accounting.
4. *Business Administration 13,* Business Mathematics.
5. *An elective.*

SOPHOMORE PROGRAMS

A sophomore must give priority in his program to any subject requirements which remain to be satisfied and should provide for an introduction to the field or subject in which a "major" or an "integrated program" will be chosen. The remaining elective choices provide the opportunity for each student to broaden the range of his interests.

The selection of a major subject is required of candidates for the degree of Bachelor of Arts at the time of registering for the sophomore year.

Sophomores may elect any course designated by a number beginning with the numeral 1, indicating "primarily for undergraduates"; they are not admitted to courses "for advanced undergraduates and graduate students," designated by numbers beginning with the numeral 2.

JUNIOR AND SENIOR PROGRAMS

Programs for the junior and senior years should be planned as a unit. This brings the entire college course under scrutiny; concentration, balance and diversity can be seen in relation to each other and adjusted to desired proportions; the inevitable choices between desirable courses, since all cannot be included in the program, can be made and costly mistakes due to haste and the overlooking of important facts can be avoided. Failure so to plan may result in the omission of important courses because of conflicts in the schedule or the alternation of courses in successive years. The requirement of a comprehensive examination should be constantly kept in mind.

The selection of an "area of concentration" is required of each candidate for the degree of Bachelor of Business Administration before the beginning of the junior year.

Juniors and seniors may elect any courses "primarily for undergraduates" or for "advanced undergraduates and graduate students" subject to any conditions stated in the descriptions of the courses. Under special conditions and with the approval of the College Board and of the Secretary of the Graduate Board in each case, seniors who rank in the upper third of their class may be admitted to courses "primarily for graduate students" designated by numbers beginning with the numeral 3.

ACCELERATED PROGRAMS

At least three years of college study in residence is required for a bachelor's degree. A student may earn the degree in this minimum time, or in three and one-half years, if he is prepared to make the additional effort which is required and is able to maintain the required level of scholarship.

Such accelerated programs are possible through a combination of six-course programs during the regular academic year and attendance at summer schools. Credit toward a degree for study at a summer school is granted only when it is officially authorized in advance in each individual case.

To complete the requirements for a bachelor's degree at the end of three years it is necessary for a student to carry a six-course program through all three years and to attend two six-week summer schools. Only students of exceptional ability and in excellent physical condition are advised to undertake such a program. To complete the requirements for a bachelor's degree at the end of three and one-half years it is necessary for a student to accumulate, within that time, credit for two and one-half courses in addition to a regular program. This may be accomplished without attendance at summer school if the student carries a six-course program through two and one-half years. More commonly a student will attend two summer schools and carry a six-course program through three semesters, or attend three summer schools and carry six courses through two semesters.

SIX-COURSE PROGRAMS

A student whose average grade for any semester is C+ or better is permitted to register for a program of six courses for the following semester.

A senior whose graduation within the academic year depends on the completion of a six-course program during that year may register for such a program in either semester if his average grade for the preceding semester is C— or better.

A freshman may normally register for a program of six courses in the first semester of his freshman year. In subsequent semesters he is subject to the regulation stated above.

There is an additional tuition charge of sixty dollars for each semester in which a student registers for a six-course program.

SMALL PROGRAMS

Under special circumstances programs of fewer than five courses may be permitted. In general no change of status or of obligation is involved when a student's program is reduced to four courses, nor is there any reduction in the charge for tuition.

A student whose program consists of fewer than four courses is designated as a part-time student. Part-time students are excused from the requirement in physical training, are not required to attend the weekly assembly and do not pay the "activities fee". They are charged for tuition at the rate of sixty dollars for each course in each semester.

PROGRAMS FOR SPECIAL STUDENTS

Special students register for such programs as they agree upon in consultation with the instructors concerned. They are not required to attend the weekly assembly nor are they subject to a requirement in physical training. Special students who register for programs of four or more courses are required to pay the activities fee; others are not required to pay this fee.

Special students pay tuition at the rate of sixty dollars for each course for each semester.

Requirements for a Bachelor's Degree

The fields in which instruction is offered in the colleges are classified for administrative purposes in four "groups" as follows:

Group A (Science and Mathematics). Biology, botany, chemistry, experimental psychology, geology, mathematics, physics, and physiology.

Group B (Social Sciences). Economics, education, geography, government, history, international relations, philosophy, psychology, and sociology.

Group C (Language and Literature). Greek, Latin, English, French, German, Russian, Spanish, and an interdepartmental course in language and literature.

Group D (Fine Arts). Art and Music.

All college regulations involving a quantitative statement of credit are expressed in terms of courses.

A course as a unit of credit normally implies three or four class meetings or laboratory exercises per week throughout two semesters and constitutes one-fifth of a student's normal program. Where departments offer fractional courses, these will be combined in reckoning a student's total credit in courses. Students admitted to classes primarily for graduate students receive credit of one-half course per semester irrespective of the number of class meetings.

A student in good standing who completes the requirements for either the degree of Bachelor of Arts or the degree of Bachelor of Business Administration as stated below will be recommended for the corresponding degree unless, in the judgment of the College Board, there is cause for withholding the recommendation.

GENERAL REQUIREMENTS FOR A BACHELOR'S DEGREE

The following requirements, 1 through 5, apply to all candidates for a bachelor's degree.

1. *Residence.* Not less than three academic years of college study in residence. At least one full year and usually the last year before the degree is conferred must be spent at Clark University. A year in residence signifies the satisfactory completion of five year courses at Clark University.
2. *Course requirements.* Twenty courses in addition to required physical training, except in the case of veterans who are eligible for benefits under Public Laws 16 or 346 as amended by Public Law 268, and veterans who are eligible under Public Laws 550 and 894. Such veterans will normally be graduated on the completion of nineteen courses, credit for the twentieth course being granted for military service and miscellaneous training in service.

   A satisfactory scholarship record must be maintained throughout the entire program.
3. *Comprehensive examinations.* Beginning with the Class of 1953, a satisfactory record in a comprehensive examination is required of every candidate for a bachelor's degree in Clark University with the exception of those in the liberal arts program whose majors are in the fields of Biology, Chemistry or German.
4. *Physical training.* Three years of physical training, two hours per week. Veterans who have completed the basic training for any branch of military service and those who served in the Merchant Marine are excused from the requirement in physical training.
5. *Assembly.* Attendance at a weekly assembly is required.

   Requirements 4 and 5 are in addition to the course requirements as stated above.

In addition to the general requirements 1 through 5, the following special requirements apply to candidates for the degree of Bachelor of Arts and for the degree of Bachelor of Business Administration respectively.

A. Special Requirements for the Degree of Bachelor of Arts.

6A. *A major.* Seven courses.

The major will normally include certain of the courses specified in the following requirements.

7A. *Group A.* Two courses, one in each of two different fields.

8A. *Group B.* Two courses, one in each of two different fields.

9A. *Foreign language.* Minimum, one course.
  a. One course in the freshman year.
  b. One course at or beyond the level of a third year college course.

10A. *English.* One and one-half courses.
  a. English 11. In the freshman year.
  b. An additional half-course in English.
  c. Satisfactory proficiency in the use of English.

11A. *Fine Arts.* A half-course in Fine Arts or Music or a year course in a foreign civilization.

NOTES ON SPECIAL REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ARTS

6A. Majors.

A departmental major consists of seven courses designated by the department for this purpose. Four or five of these must be courses in the major subject; the remaining courses must lie in fields of study closely related to the major subject.

For the completion of an acceptable major at least eleven of the fourteen semester grades involved must be higher than C—.

Mathematics 11 is a requirement in the freshman year for a student who intends to major in Group A, including pre-dental and pre-medical students. This course may, with the approval of the major department, be included in the seven courses constituting the major.

Students majoring in Group C who have not offered at least two units of Greek or Latin for admission are required to take a year's course in either classical civilization or elementary Greek or Latin. The course satisfying this requirement may, with the approval of the major department, be included in the seven courses constituting the major. The choice between "civilization" and language is subject to the approval of the major department. If a language course is chosen, this requirement should normally be satisfied during the freshman year.

An interdepartmental major includes eight or more courses chosen with regard to related content and purpose in fields which cross departmental boundaries. Two such programs are now available. These will be found fully outlined in the alphabetical list of "Departments and Courses."

7A. Group A.

The two courses may not be distributed between more than two fields of study. One of them *must* be a laboratory course.

Courses in the history of the sciences are not counted toward the fulfillment of this requirement.

8A. Group B.

The two courses may not be distributed between more than two fields of study.

9A. Foreign Language.

Requirements (a) and (b) may both be satisfied by a single course taken in the freshman year.

Students whose previous education has been largely in a language other than English are relieved of the requirement in foreign language upon the completion of English 11.

11A. Fine Arts.

The requirement may be satisfied by a half-course chosen from the following list: Fine Arts 11, 12b, 191a, 192a; Music 12, 13, 14; or by a year course: French 113, German 141, or Greek 123a and Latin 123b.

B. Special Requirements for the Degree of Bachelor of Business Administration.

6B. *An "integrated program"* of ten courses.

This program will normally include certain of the courses specified in the following requirements.

7B. *Business Administration,* three courses.
- a. Business Administration 10a, Elements of Distribution and 10b, Elements of Production. In the freshman year.
- b. Business Administration 18, Business Organization and Finance.
- c. Business Administration 220, Analysis of Business Problems.

8B. *Economics,* two courses.
- a. Economics 11, Principles of Economics.
- b. Economics 13, Money and Banking.

9B. *Government,* one course.

Government 15, Introduction to Government.

10B. *Business Law,* one course.
Business Administration 20.

11B. *Business Mathematics,* one course.
Business Administration 13. In the freshman year.

12B. *Accounting,* one course.
Business Administration 117, Principles of Accounting. In the freshman year.

13B. *Statistics,* one course.
Business Administration 16, Business Statistics.

14B. *English,* one and one-half courses.
a. English 11a, Composition; Business Administration 14b, Business English. In the freshman year.
b. Business Administration 17a, Public Speaking. A half-course.

NOTES ON SPECIAL REQUIREMENTS FOR THE DEGREE OF BACHELOR OF BUSINESS ADMINISTRATION

6B. The Integrated Program.

This program is based on the choice of a "field of special interest" within the general area of business administration and must be submitted to the student's faculty adviser at the end of the sophomore year. Ordinarily a program will not be approved unless it includes, in addition to the required courses which are listed above, at least five courses in Business Administration or closely related subjects.

Typical areas of concentration for integrated programs are:

Accounting

Intermediate Accounting
Cost Accounting
Auditing
Advanced Accounting
Industrial Management
Federal Tax Accounting

Management

Cost Accounting
Analysis of Business Problems
Industrial Relations
Industrial Management
Techniques of Managerial Control
Industrial Psychology

Finance

Business Organization and Finance
Money and Banking
Public Finance
Business Cycles
Analysis of Business Problems

Marketing

Elements of Distribution
Salesmanship
Advertising
Marketing Research
Sales Management
Retailing Principles

Foreign Trade	*Personnel Management*
Principles of Marketing	Industrial Psychology
International Economics	Personnel Management
Economic Geography	Industrial Management
Industrial Psychology	Industrial Relations
A foreign language	Labor Problems

8B.

Under special conditions Economics 13 may be replaced by certain other courses in economics.

Grades and Examinations

GRADES

At the end of each semester grades are reported for each student in each course in terms of A, excellent; B, good; C, average; D, poor; F, failure. The modifying symbols plus (+) and minus (—) are used with each of these letter grades with the exception of F, giving twelve levels of passing grades. A report of "incomplete" is permitted only when severe sickness or some other equally unavoidable circumstance prevents the completion of a course.

A record of "failure" in a course is final and not subject to change on the basis of any subsequent performance of the student who is involved. Credit for a course in which a failure has been reported may be secured only by repeating the course and earning a passing grade.

SCHOLARSHIP STANDARDS

Courses with the grades of D+, D or D— may not be counted toward a bachelor's degree beyond one-quarter of the total credit required; i.e., not more than five (5) such courses, or their equivalent in fractional courses, may be counted. In the administration of this regulation only grades received and credit earned in Clark University are considered. If grades are not available for some of the twenty courses required for the degree, the maximum credit which may be counted with grades of D+, D or D— is reduced to one-quarter of the total credit from all courses in which grades are available.

Classification of students. A student continues to be listed in the class with which he or she entered college until the end of the third, or junior, year. At this time only those students who have credit for at least fourteen courses with a minimum of eighteen semester grades of C— or better are promoted to the senior class.

Probation. Students with unsatisfactory grades are placed on probation. Failure of a student to remove himself from probation after two consecutive terms or three non-consecutive terms normally results in separation from college.

EXAMINATIONS

Final examinations are regularly given at the end of each semester in all college courses. Approximately two weeks are set aside for each examination period and an attempt is made to distribute the examinations for any individual student throughout this period. Absence from a final examination, except for the most compelling reasons, usually results in a record of failure in the course.

Other examinations and tests may be given at any time during the semester at the convenience of the instructors.

COMPREHENSIVE EXAMINATIONS

"Comprehensive examinations" in a student's major subject are given in the spring of the senior year. These examinations test the student's grasp of the subject as a whole and do not duplicate the individual course examinations. They are designed to determine whether the student has achieved a reasonable integration of the subject matter which has been presented in the separate courses.

"Comprehensive examinations" consist of at least four hours of written work plus a possible oral or laboratory examination. Students who do not pass the comprehensive examinations will be entitled to one re-examination during the following academic year, but no student will be given a third examination except by express permission of the College Board.

Comprehensive examinations are not required at present in the departments of Biology, Chemistry, or German.

Honors

The colleges award "annual honors" to outstanding students in each of the four classes, and grant the bachelor's degree "with honor" to students who maintain a praiseworthy level of scholarship throughout the college course. The degree is also granted with honors in a particular field of study to students who have qualified for this distinction under the rules of the colleges.

Additional recognition of outstanding scholarship was the function of the Clark Scholarship Society from its founding in 1914 until 1952. Scholarly attainment in the area of the "liberal studies" is now the major concern of the Clark chapter of the Society of Phi Beta Kappa.

ANNUAL HONORS

First honors and *second honors* are awarded at the end of each year to members of the freshman, sophomore, junior and senior classes who have, in the judgment of the College Board, distinguished themselves by their scholarship during the year.

COURSE HONORS

The bachelor's degree is awarded *with honor, with high honor* and *with highest honor* to members of each graduating class whose records, in the judgment of the College Board, warrant this distinction.

DEPARTMENTAL HONORS

A program leading to the degree of Bachelor of Arts *with honors in a particular subject,* may be undertaken by a student at the beginning of the junior year if his cumulative scholarship average places him among the highest third of his class. Under this plan a student in cooperation with his honors' adviser organizes the work of his junior and senior years into a unified program which may include a maximum of two "honors courses." In these he works with a considerable measure of independence under the supervision of the adviser. In the senior year each candidate must pass satisfactorily a comprehensive examination given by his major department.

Application for honors work should be made, in writing, to the major department not later than the first day of May of the sophomore year.

Admission to candidacy for departmental honors does not relieve a student from any of the standing regulations of the college except as specifically stated above. If a student's candidacy for honors is terminated for any reason, the amount of credit, if any, to be allowed for special honors courses will be determined by the College Board in consultation with the major department.

An honors student must withdraw from his candidacy at the end of any semester in which he has not maintained a standing for the semester in the upper half of his class.

THE CLARK SCHOLARSHIP SOCIETY

The Clark Scholarship Society was organized in 1914 and was made temporarily inactive in June 1953. This change, effected by the executive committee of the society, was considered advisable as a result of the installation of a chapter of Phi Beta Kappa at Clark in 1953. At a meeting on June 6, 1954 it was voted to make the Clark Scholarship Society an alumni organization. Dr. Theodore Nicol was elected president and Mrs. Michael T. Neary, secretary-treasurer for the academic year 1954-1955.

PHI BETA KAPPA

The Society of Phi Beta Kappa, founded at the College of William and Mary in 1776, is dedicated to the recognition and encouragement of outstanding scholarly achievement in liberal studies—those studies concerned principally with a knowledge, understanding, or appreciation of the natural and social world in which we live. The Society establishes chapters in colleges and universities throughout the United States where the curricula are broadly cultural in scope and where high standards of scholarship are maintained.

In harmony with the underlying purposes of the Society, the Clark chapter, Lambda of Massachusetts, established in 1953, seeks to foster among undergraduates an appreciation of the contributions to culture and civilization which have been made by liberal studies.

Each year the Chapter elects to membership a limited number of juniors and seniors whose programs have been definitely liberal in character and who have achieved distinction in scholarship.

General College Regulations

ATTENDANCE

Students are expected to be present on the first day of each term and to continue in attendance from day to day to the end of the term.

Attendance at a weekly college assembly is required, except in the case of part time and special students.

Regulations applying to absences from scheduled class meetings and laboratory exercises are based upon the conviction that such absences, regardless of their cause, involve a loss to the student and a drag upon the class. Students are, accordingly, expected to be consistently regular in attendance. Subject to this general provision, students are given a considerable degree of freedom in the control of their attendance. It is expected that such freedom will not be abused, and that it will contribute to the growth of each student's sense of responsibility.

Special regulations apply to attendance at the weekly assembly and physical training.

PHYSICAL TRAINING

Regular physical exercise is required of all students, with the exception of veterans, for the general promotion of their health and mental efficiency. Physical training is scheduled at times which avoid conflict with recitation hours. Students are usually excused from this requirement only on the recommendation of the medical director.

DINING HALL

Undergraduates who do not live in their own homes are required to board at the Dining Hall. This fact must be recognized and subscribed to by all who seek admission to either the Men's College or the Women's College.

Board at the Dining Hall is $190 per semester, payable as a whole in advance, or in monthly installments according to a fixed schedule.

DORMITORIES

Freshman men not living in their own homes or with near relatives are required to room in Estabrook Hall.

Women students who do not live in their own homes or with near relatives are required to room in one of the Women's Dormitories.

For further details see the announcements of the Men's College and the Women's College.

INFIRMARY

The Infirmary, located at 6 Downing Street, opposite the University Library, is open during the academic year. A nurse is in attendance and the University physicians are on call. Facilities are provided for the treatment of emergencies and for minor medical services to all students while they are on the campus; in addition there is provision for the temporary hospitalization of resident students in cases of more serious illness.

For the use of the Infirmary as outlined above and for annual physical examinations supplemented by other auxiliary health services a fee is collected with the tuition in the case of all undergraduates.

Fees and Expenses

The principal University charges which affect an undergraduate student are listed below. Small additional fees are collected in certain departments. For these the departmental announcements should be consulted.

The following regulation was adopted by the trustees on March 28, 1931:

"No refund of tuition and no release of obligation to pay tuition shall be made because of failure for any reason on the part of a student to complete the work of any semester after it is begun."

Matriculation fee $5.00

Paid by every student who is admitted to the University.

Induction fee for men $15.00

Paid by all freshman men who enter the College in September.

Induction fee for women $20.00

Paid by all women students who enter the college for the first time in September.

Tuition $600.00 per year

For other than normal programs (four or five courses concurrently) the charge for tuition is at the rate of $60.00 per semester for each course.

One-half of the tuition is due and payable on or before the first day of each semester.

Activities fee $30.00 per year

Paid by all college students who are enrolled for programs of more than three courses and by special students who are enrolled for programs of more than three courses.

One-half of the activities fee is due at the beginning of each semester.

Laboratory fees

For each undergraduate laboratory course in biology, geology, physics, psychology and Chemistry 11. $10.00 per semester

For each undergraduate course in chemistry, excepting Chemistry 11. $15.00 per semester

Laboratory fees are due at the beginning of each semester.

Breakage and supplies deposits

For each undergraduate course in chemistry, excepting Chemistry 15. $10.00

For Chemistry 15. $20.00

Deposits are due when registration for the courses is completed.

The Bursar returns any unused balance or collects for breakage in excess of the deposit at the end of the course.

Diploma fee, for a bachelor's degree $5.00

Due at the beginning of the semester in which a student expects to complete his study in residence for the degree.

Dormitory charges

Room rent, for each occupant From $180.00 to $300.00 per year

Room rent is payable either in advance or in installments, one-fifth at the beginning of each semester and one-tenth on the first day of November, December, January, March, April and May.

Room deposit $25.00 for each occupant

Due before a room is occupied.

Dining Hall charges $190.00 per semester

Payable in advance, or in installments of $47.50 on the first day of October, November, December, January, February, March, April and May.

Paid by all undergraduates who do not live in their own homes.

Health Services and Infirmary fee

For students living at home $4.00 per semester

For resident students $7.50 per semester

Due at the beginning of each semester.

Fee for late payment of tuition $5.00

Paid by students who fail to pay tuition when due.

Fee for late registration $1.00 per day, to a maximum of $5.00

Paid by students who fail to complete registration within the official Registration Period.

COLLEGE EXPENSES—SUMMARY

For the academic year 1955-56, a student who lives in a dormitory and boards at the Dining Hall will find that the necessary cost for the year (September to June) is about $1,300 in addition to personal expenses.

This cost is distributed as follows:

Annual fees	
Tuition	$600.00
Room rent	180.00 to 300.00
Board	380.00
Activities fee	30.00
Laboratory fees (estimated)	none to 60.00
Health services and infirmary fee	15.00
Books and supplies (estimated)	50.00
Total	$1,255 to $1,435
Non-recurring fees, collected in the first year only	
Matriculation fee	$5.00
Induction period fee	$15.00 or $20.00

Student Activities

Student life at Clark is, as would be expected at a small institution, friendly and informal. Fixed rules and regulations are few, the assumption being that students will conform to the recognized standards of morality, good order, and consideration for others. College activities are under the minimum degree of faculty oversight which is necessary to insure responsibility in business dealings and consideration of the welfare of the individual student and of the college community.

The Activities Fee. Athletics and several non-athletic activities are partially supported by an activities fee. This fee admits a student, without additional charge, to all athletic contests held on the college grounds, provides him with the college newspaper, and admits him to plays and concerts presented by the dramatic and musical clubs.

Activities. The programs in athletics are described in the sections dealing with the Men's College and the Women's College.

Opportunities for recreation are found in dramatic clubs and musical clubs, under expert direction; in editing and publishing the college newspaper (*The Clark Scarlet*), the literary magazine (*Helicon*), and the senior yearbook (*Pasticcio*); also in such organizations as the Debating Council and International Relations Club.

Formal "proms", informal "Bohemes" and fraternity activities furnish further opportunities for social life. One of the University buildings houses the Student Union. For many students, the most prized opportunity for social contacts is in the offices and laboratories, where members of the faculty may be visited with ease and freedom.

Eligibility for Non-competitive Activities. All students may participate so long as their scholarship proves satisfactory. Details are published in the Students' Handbook.

Scholarships and Loans

Undergraduate scholarships are provided by the University from endowed funds and from other sources. A limited amount of part-time employment is provided by the Library, the Dining Hall and various University offices. Educational loans are available from funds which have been established for this purpose.

Many scholarships and other forms of pecuniary aid for college students are provided in Worcester and elsewhere throughout the United States by local sources. Any interested person should address inquiries to school officials, churches, fraternal organizations, chambers of commerce, etc.

SCHOLARSHIPS

Undergraduate scholarships are generally awarded on the basis of pecuniary need with due regard to character and ability. The scholarships vary in amount and are in some cases restricted to residents of a definite locality or to those studying particular subjects.

To be eligible for a scholarship, an entering freshman must have a scholastic record which places him in the upper third of his preparatory school class. A college student is eligible if he has secured a rank in the upper half of his class for the preceding semester.

Scholarships are awarded at the beginning of each semester. Ordinarily an award for the first semester is continued through the second semester if the holder maintains a position in the upper half of his class for the first semester.

Applications for undergraduate scholarships should be filed at an early date on forms which may be secured from the college office.

Aid given in the form of scholarships is not regarded as a loan. It is recognized, however, that those who receive such aid may wish to return the amount in later years. Funds for scholarship purposes are much needed and greatly appreciated.

The following scholarships are currently available to students in the undergraduate colleges with the restrictions noted.

The Ellis-Hubley Competitive Scholarships. These are competitive scholarships restricted to male residents of Worcester who have graduated from Worcester secondary schools. The stipends, $700 annually to each beneficiary, are provided by money set aside from the income of funds bequeathed in memory of Gordon A. Hubley, Clark 1910, and of Theodore T. and Mary G. Ellis. One appointment is made each year to a member of the freshman class and the award is normally continued throughout the four years of the college course.

A candidate must receive the recommendation of the Principal or Head Master of the school in which his preparation for college is completed, before his application can be considered. Two full tuition scholarships are awarded annually to applicants who, in the judgment of the Committee on Scholarships, stand next below the successful applicant.

The Jonas G. Clark Scholarships. These scholarships have been established by the trustees to provide either full tuition or half tuition for undergraduate male and female students from outside of Worcester.

The Theodore T. and Mary G. Ellis Scholarships. These scholarships provide either full tuition or half tuition for male or female residents of Worcester who are students in "the collegiate department of Clark University."

The Sanford Memorial Scholarship. The Sanford Memorial Fund was established by alumni of the University in honor of Edmund C. Sanford, president of Clark College from 1909 to 1920. The Fund provides an annual scholarship amounting at present to approximately $200 for a male senior undergraduate.

The Livermore and Ambulance Scholarship. The endowment for this scholarship was provided by citizens of Worcester in honor of Charles Randall Livermore, the first Clark man to fall in battle in the first World War, and of his companions in the Clark Unit of Ambulance Drivers. Fifty dollars or more is awarded annually on the basis of academic success, character, and usefulness to the college. This scholarship is for male undergraduate students who are residents of Worcester County.

The Henry A. Willis Scholarships. Male students from Fitchburg, Massachusetts, and vicinity have first consideration in the award of these scholarships. In the absence of suitable candidates from this community grants may be made to others.

The Helen Brewster Randolph Memorial Scholarship. A fund, established by the late Professor Charles B. Randolph in memory of his mother, provides about $250 annually for scholarships restricted to male college students, preferably those whose major is a foreign language.

The Gordon A. Hubley Scholarships. These scholarships are provided by a fund which was bequeathed by Alice B. Hubley in memory of her son, a graduate of the college in the class of 1910. The income is for the assistance of male undergraduates who are residents of Worcester.

The Alice Friend Newton Memorial Scholarship. This scholarship provides full tuition for a student in the Women's College whose major is psychology.

The William Richardson Scholarship. This scholarship was established by a bequest of Carlton E. Richardson of the college class of 1908 as a memorial to his father. The income of a fund of $7,500 is available "preferably for the education - - - - of boys of the Protestant faith."

The Jennie L. Richardson Scholarship. This scholarship was established by a bequest of Carlton E. Richardson of the college class of 1908 as a memorial to his mother. The income of a fund of $7,500 is available "preferably for the education - - - - of girls of the Protestant faith."

The Ernest R. Whitman Memorial Alumni Scholarship. The fund, established by the Alumni Association in honor of the Director of Physical Education for Men at Clark College from 1904 until his death in 1948, provides financial aid to men or women students possessing high qualities of leadership.

The B'nai B'rith Scholarship. The Worcester Chapter, Order of B'nai B'rith provides a scholarship which is primarily but not exclusively for the aid of Jewish students.

The Probus Club Scholarship. The Probus Club of Worcester offers an annual scholarship of two hundred dollars.

The Clark University Faculty Women's Club Scholarships. These scholarships are available to undergraduate students, either men or women, who rank high in intellectual and personal qualities.

Gillette
MANICURE AIDS
SIGHT SAVERS

ROBERT EITNER
Quellen-Lexikon

The Clark University Alumnae Association Scholarships. Two scholarships are customarily offered by the Alumnae Association to students in the Women's College.

The National Council of Jewish Women Scholarship. The Worcester Section, National Council of Jewish Women, awards a $200 scholarship each year to a Jewish girl from Worcester or Worcester county who is attending Clark University.

The Soroptimists Club Scholarship. The Soroptimists Club of Worcester provides an annual scholarship for a student in the Women's College.

The Pleiades Scholarship. The women's senior honor society, Pleiades, raises, each year, a considerable sum of money which it applies to scholarships for students in the Women's College.

The Aaron Fuchs Memorial Scholarship Fund, given by Mrs. Celia Fuchs in memory of her husband and in honor of her sons Lawrence and Jerome Fox of the classes of 1944 and 1953 respectively, provides scholarship aid for non-residents of Worcester or of Worcester County. Awards under this fund are made by the Scholarship Committee.

EDUCATIONAL LOANS

Loans are available for undergraduate students from the funds listed below. These loans bear interest at the rate of 4% per year. Applications for loans should be made at the office of the Treasurer.

THE ALUMNI LOAN FUND was established by the trustees and the alumni.

THE ESTABROOK LOAN FUND was created by the generosity of the late Arthur F. Estabrook of the Board of Trustees.

THE HASKELL TALAMO LOAN FUND has been established by relatives and friends of the late Doctor Haskell Talamo, A.B., Clark University, 1916.

THE LOUIS N. WILSON FUND, established by the first librarian of Clark University, is a loan fund for male students in the college.

The Men's College

Clark College

The Collegiate Department of Clark University, popularly known as Clark College, was established in 1902. Originally attendance was restricted to men and a three-year program led to the degree of Bachelor of Arts. In 1922 the normal period of residence for the bachelor's degree was extended to four years, in 1941 a second program leading to the degree of Bachelor of Business Administration was introduced and in 1942 women were admitted to college classes.

The establishment of the financially independent Women's College made possible an enrichment of the undergraduate curriculum through an agreement under which men and women attend the same classes and the two colleges share the costs of administration and instruction.

FRESHMAN INDUCTION PERIOD

The freshman class of the Men's College assembles a few days before the beginning of the academic year in September for an "induction period." During this period the members of the class become acquainted and meet a selected group of upper class students as well as members of the college staff. Formal activities include tests which assist in placing a student in the proper class sections, individual and group conferences and registration for a program of studies.

It has been customary to spend the induction period at some well-equipped camp where there are ample facilities for recreation.

A fee of $15 is charged for the induction period.

THE MEN'S DORMITORY — ESTABROOK HALL

Freshman men who do not live in their own homes are required to room in the freshman dormitory, Estabrook Hall.

Occasionally there may be accommodations in the dormitory which are not required for freshmen. In such cases these accommodations may be rented by upperclassmen.

The charges for accommodations in Estabrook Hall range from $180 to $300 per year.

Dormitory room rent is payable either in advance or one-fifth at the beginning of each semester and one-tenth on the first day of November, December, January, March, April and May.

Rooms are assigned to freshmen in order of application, when the application is accompanied by the deposit of $25. Students who indicate a desire for a room together will be accommodated whenever possible.

This deposit is returned, less a charge for lights and for any damages to the room or its furnishings, after the key to the room is surrendered to the Bursar.

THE MEN'S SENIOR HONOR SOCIETY, GRYPHON

The men's senior honor society, Gryphon, selects each year from the junior class a group of outstanding men who constitute the membership of the society for the following year. The society plays an important part in campus life and in maintaining the traditions of the college. Among its regular functions are the supervision of the annual "rope pull" between the freshman and the sophomore classes and the management of "Spring Spree Day."

ATHLETICS

Students in the Men's College have the opportunity to participate in intercollegiate soccer, baseball, tennis, basketball, fencing and crew. Competent coaches have immediate supervision over the athletic teams. In addition to the program in intercollegiate athletics there is an extensive program of intra-mural sports.

Eligibility for Competitive Activities. Participation in organized extracurricular competitive activities is denied only when a student's scholastic record indicates that continuance in an activity might be responsible for scholastic failure.

Any student carrying less than a full program of studies is ineligible unless his reduced program permits graduation at the end of the year in which that program is carried.

Students admitted with advanced standing from another college are ineligible during the first half-semester of residence at Clark College.

A special student is normally not entitled to participate in competitive activities of the college. The College Board may, however, permit such participation in the case of a special student who is enrolled for a program of five courses.

General supervision of the athletics program is vested in the Committee on Athletics, consisting of the Directors of Physical Education, the faculty Committee on Athletics, and the Athletic Council.

The Women's College

The Women's College of Clark University was established in the fall of 1942. Its financial basis is entirely distinct from that of the Men's College although it shares, through a cooperative arrangement, the services of the same administrative and teaching staffs.

Women attend the same classes as men and are subject to the same requirements for admission and for graduation with the exception of a required course in physical education.

General supervision of women students rests with the Dean of Women, Miss M. Hazel Hughes.

The Advisory Board for the Women's College assists the administration in respect to general policy and social affairs.

ADVISORY BOARD FOR THE WOMEN'S COLLEGE

MRS. LAURENS C. SEELYE, *Chairman*
MRS. ROBERT S. BOWDITCH, *Secretary*
MRS. ROGER S. GREENE
MRS. R. JOHN GRIEFEN
MRS. FRANK L. HARRINGTON
MRS. HOWARD B. JEFFERSON, *honorary member*
MRS. MYLES MORGAN, *Vice-Chairman*
MRS. J. HERBERT JOHNSON
MISS ALICE F. SHEEHAN
MRS. CHARLES T. TATMAN
MRS. RICHARD K. WELLINGTON
MISS M. HAZEL HUGHES, *Dean of Women*

Representing the Alumnae

MRS. JAMES J. REDICAN, *Chairman*
MISS GLADYS HAGUE, *ex-officio*
MRS. GERALD R. ANDERSON
MISS MARION MCCANN

Representing the Faculty Women's Club

MRS. HEINZ WERNER, *Chairman*
MRS. WILLIAM H. CARTER
MRS. JAMES A. MAXWELL
MRS. F. EUGENE MELDER

The center for women's activities on the campus is the Women's Lounge, located on the main floor of Jonas G. Clark Hall. Attractively decorated and comfortably furnished, the lounge provides a meeting place for formal or informal groups and in general serves the comfort and convenience of women students.

The Women's Gymnasium with its connected dressing rooms and shower rooms occupies the western end of the ground floor of Jonas G. Clark Hall. Here are located also a second lounging room and a lunch room.

INDUCTION PERIOD

The freshman class of the Women's College and all women transfer students assemble at the college on Tuesday before the opening of the academic year in September for an "induction period." During this period the new students become acquainted and meet a selected group of upper class students as well as members of the college staff. Formal activities include certain tests which assist in placing students in the proper class sections, individual and group conferences and registration for a program of studies.

It has been customary to spend the induction period at some attractive and well-equipped girls camp where there are ample facilities for recreation.

A fee of $20 is charged for the induction period.

DORMITORIES

Undergraduate women who do not live at home are expected to live in one of the women's dormitories. Other arrangements are permitted only on written request from a parent or guardian and the consent of the Dean of Women.

There are four dormitories, each housing from fifteen to twenty-six students. Each has its house mother and a dormitory committee which meets with the house mother to consider matters pertaining to dormitory living such as house meetings, the social life of the dormitory, the observance of dormitory regulations, etc. These groups also act as advisory boards for the students with whom they are associated.

A Dormitory Council composed of representatives from the four houses, the four house mothers and the Dean of Women meets once a month to discuss matters of interest to the dormitory residents. This board often appoints student committees to make surveys in particular areas of student life.

The charges for accommodations in the Women's Dormitories range from $180 to $300 per year.

Dormitory room rent is payable either in advance or one-fifth at the beginning of each semester and one-tenth on the first day of November, December, January, March, April and May.

Rooms are assigned to freshmen when the application is accompanied by the deposit of $25.

This deposit is returned, less a charge for lights and for any damages to the room or its furnishings.

Students who indicate a desire for a room together will be accommodated whenever possible.

THE WOMEN'S SENIOR HONOR SOCIETY, PLEIADES

The women's senior honor society, Pleiades, selects each year from the junior class a group of outstanding women who constitute the membership of the society for the following year. The society plays an important part in campus life and in maintaining the traditions of the college. In recent years it has provided funds for scholarship aid to one or more women students.

PHYSICAL EDUCATION AND ATHLETICS

There is a physical education program for women which is designed to improve posture and general health. Every student is given a physical examination at the beginning of each year.

Attendance at classes in physical education is required on the basis of two periods per week for three years. Body mechanics and one of the rhythmic activities is required during the three years. Participation in one group sport and one individual sport is required. Folk dancing, square dancing and modern dancing are also offered. Swimming and life saving courses are available through the entire year by arrangements with the Young Women's Christian Association. These courses are conducted by a member of the physical education staff of the University.

Several types of athletics are open to women. Offered in the fall and spring are hockey, crew, archery, tennis, fencing, and golf. Tournaments are held in the spring and fall and a cup is awarded to the winner of each event. During the winter months basketball is the principal organized athletic activity; volleyball and badminton are also offered. Women students use their own gymnasium for practice, but have the use of the University Gymnasium for games with outside organizations.

The Women's Athletic Association arranges for all sports activities; both within the college and with other colleges in the New England area.

The Division of Business Administration

The Division of Business Administration is an integral part of the undergraduate organization of Clark University and is responsible for the college program in business administration.

General supervision of the program rests with the Administrative Committee, representing the Faculty. Administrative responsibility rests with the Acting Director, Professor Eugene J. Kelley.* The Advisory Committee composed of business executives assists in the formulation of general policies.

ADVISORY COMMITTEE TO THE DIVISION OF BUSINESS ADMINISTRATION

NATHAN T. BASCOM,
President, Worcester Mechanics Savings Bank
JOHN W. COGHLIN,
President, Coghlin Electric Company
HORACE GOOCH,
Treasurer, Worcester Moulded Plastics Company
EVERETT W. HICKS,
Vice President, Norton Company
FREDERICK W. HOWE,
President, Crompton & Knowles Loom Works
H. LADD PLUMLEY,
President, State Mutual Life Assurance Company
PAUL W. SPAULDING,
President, John C. MacInnes Company

The program in Business Administration is given coöperatively by the Departments of Economics and Sociology, English, Geography, History and International Relations, Mathematics and Psychology.

THE BUSINESS ADMINISTRATION PROGRAM

The program leading to the degree of Bachelor of Business Administration is designed to prepare young men and women for careers in business.

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*On leave of absence 1954-1955. Administrative responsibility during this year rests with Professor George E. Hargest.

Students who enroll in this program are members of either the Men's College or of the Women's College and are subject to the general college regulations as well as to the special requirements for the degree of Bachelor of Business Administration. They may choose their electives in other fields such as social studies, language, fine arts and science.

The business program is designed to provide an opportunity for the student to become acquainted with the basic characteristics of modern industry and commerce, to acquire an understanding of the general principles of business and to receive training in the techniques common to all successful business enterprises. It should assist the student in adapting himself to general business requirements and in relating his specific job to the entirety of business and industrial enterprise as well as in perfecting his skill in particular techniques.

The program consists of carefully selected courses in arts and sciences together with specialized courses of particular interest to students of business. Among the former are basic courses in English composition, mathematics, economics, psychology, and government. Among the latter are courses in accounting, finance, managerial techniques, statistical methods, merchandising, and business law. Training in the analysis of administrative problems is emphasized throughout the program.

A uniform program including English, elements of production and distribution, accounting and business mathematics is normally required of all business administration students in the freshman year.

The following courses are required of all candidates for the degree of Bachelor of Business Administration and must be included in the programs covering the sophomore, junior and senior years:

B. A. 16	Business Statistics
B. A. 17a	Public Speaking
B. A. 18	Business Organization and Finance
B. A. 20	Business Law
B. A. 220	Analysis of Business Problems
Economics 11	Principles of Economics
Economics 13	Money and Banking*
Government 15	Introduction to Government

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*Under special conditions Economics 13 may be replaced by certain other courses in economics.

At the end of the sophomore year, each candidate for the degree of Bachelor of Business Administration must submit to his faculty adviser an integrated program of studies covering the junior and senior years. This program should indicate the student's areas of special interest and the specific courses he intends to elect. Ordinarily no program will be approved that does not include in addition to the required courses named above, at least five courses in Business Administration or closely related subjects.

Comprehensive examinations. A comprehensive examination is required of every candidate for the degree of Bachelor of Business Administration in the spring of the senior year. The successful completion of this examination demands an ability to integrate the principles covered by specialized courses in business administration and economics and a competence in at least one functional field of business administration. Candidates for the bachelor's degree are required to register for Business Administration 220 in the senior year. This course is designed in part to assist students in preparing themselves for the comprehensive examination.

In addition to the program leading to the degree of Bachelor of Business Administration, the colleges offer a less intensive program in Business Administration leading to the degree of Bachelor of Arts. Students taking this program choose Economics and Sociology as their major department. They must meet all the requirements for the degree of Bachelor of Arts including those in English, fine arts, foreign languages and sciences. First year students should take the normal college program for freshmen and should elect Business Administration 10 for the Group B requirement. The program for the second year should include Business Administration 117 and Economics 11. In the third and fourth years students should elect at least two basic courses in economics, such as Economics 13, 21, 22, 205, or 207, and at least four courses in business administration. The following are recommended: Business Administration 16, 18, 127, 20 and 220.

COURSES IN BUSINESS ADMINISTRATION

Courses in Business Administration are listed with descriptions under "Business Administration" in the alphabetical list of "Departments and Courses."

The following courses may not be counted for credit toward the degree of Bachelor of Arts: Business Administration 13, 14b, 17, 109, 125, 128, 129a, 181a, 182b, 23, 227, 237.

Departments and Courses

Interdepartmental Majors
General Education
Biology
Business Administration
Chemistry
Classics
Economics and Sociology
Education
English
Fine Arts and Music
French
Geography
Geology
German
History, Government, and International Relations
Mathematics
Orientation and Hygiene
Philosophy
Physics
Psychology
Russian
Spanish

Departments and Courses

Departments, important subdivisions of departments and certain interdepartmental groups of courses are listed in the following pages. In general, each entry includes a departmental announcement followed by a list of courses which are offered by the department.

Interdepartmental majors and *General Education* are listed first.

Departments and their subdivisions follow the first two entries in alphabetical order.

Departmental announcements contain important general information, as well as regulations concerning graduate work in the department and statements of the requirements for undergraduate majors.

Courses are, in general, arranged in sequence under each heading so as to progress from the more elementary to the more advanced. Each course is described as it has been given during the current academic year unless an accompanying note states otherwise. Notice is given in all cases where a department plans to alter the content or to omit a course. If a course is not currently given but will be offered at a later date this fact is stated.

The unit of instruction for undergraduates is a "course." A course normally meets for classroom or laboratory exercises three or four times weekly throughout the regular academic year (September to June) and constitutes one-fifth of the normal program for an undergraduate.

Each unit of undergraduate instruction as listed below yields credit for one half-course in each semester unless its value as a fractional course or a multiple course is indicated.

Both semesters of an "indivisible course" must be satisfactorily completed before any credit is given for the course.

Advanced courses, not primarily for undergraduates, are announced with a statement of the number of meetings per week. Courses primarily for graduate students yield full half-course credit in each semester without regard to the number of class meetings.

With the consent of the instructor, a course may be entered at the beginning of either semester.

The fields in which instruction is offered in the colleges are classified for administrative purposes in four "groups" as follows:

GROUP A (Science and Mathematics). Biology, botany, chemistry, experimental psychology, geology, mathematics, physics, and physiology.

GROUP B (Social Sciences). Economics, education, geography, government, history, international relations, philosophy, psychology, and sociology.

GROUP C (Language and Literature). Greek, Latin, English, French, German, Russian, Spanish, and an interdepartmental course in language and literature.

GROUP D (Fine Arts). Art and Music.

Courses are classified under three headings as follows:

1. PRIMARILY FOR UNDERGRADUATES, designated by numbers beginning with the figure "1."

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS, designated by numbers beginning with the figure "2."

3. PRIMARILY FOR GRADUATE STUDENTS, designated by numbers beginning with the figure "3."

Interdepartmental Majors

To provide undergraduate "majors" in certain fields which are intrinsically worthwhile culturally or professionally but which cross departmental boundaries, the Faculty has authorized a group of "interdepartmental majors." These permit a greater breadth of choice than the strictly departmental programs but preserve the unity of content and purpose which is inherent in the concept of a major.

An interdepartmental major includes eight or more required courses.

At present two programs are offered under this plan. These are listed below.

I. INTERNATIONAL RELATIONS

Freshman and Sophomore Years

General Educ. 14	Europe and the United States since 1500
Economics 11	Principles of Economics
Geography 10	Principles of Geography

Junior and Senior Years

Government 24	International Relations
Government 240	Seminar in International Relations
Government 241	International Law and Organization
Geography 201	Political Geography
Economics 207	International Economics
Economics	One-half course to be selected

Instructor in charge: Associate Professor Hayden.

II. AMERICAN CIVILIZATION

Freshman Year

General Educ. 14	Europe and the United States since 1500

Sophomore Year

At least two of the following courses:

Government 15	Introduction to Government
Economics 11	Principles of Economics
Sociology 11	Principles of Sociology

Junior and Senior Years

History 230	Social and Intellectual History of the United States
English 111	A Survey of American Literature
History 33	Senior Conference in American Civilization

Two courses chosen from the following list:

Sociology 12a	Cultural Anthropology
Philosophy 12	History of Philosophy
History 232	United States Constitutional History and Law
History 234a	American Diplomatic History
History 235b	The United States in the Twentieth Century
Government 251a	American Political Parties
Sociology 12b	Race and Nationality
Sociology 25	Social Institutions

Alternative courses may be chosen with the approval of the instructor in charge of the program.

Instructor in charge: Associate Professor Campbell.

General Education

Courses in General Education are distinguished from courses which are listed in departmental announcements by viewpoint and tone rather than by content. They aim to develop an understanding of the basic unity of knowledge and thought; to offer the student an opportunity to obtain a core of information and of ideas which will be possessed in common with many of his contemporaries and to stimulate intelligent and critical interest in fields of culture where he has no expectation of attaining professional competence. General Education courses are thus a valuable supplement to pre-professional or pre-vocational education. They may be advantageously used to fulfil the distribution requirements in the natural sciences, the social sciences and language and literature. They are outside the sequence of courses in a student's "major" or "field of special interest" and are essentially without specific prerequisites.

The following courses are classified for administrative purposes in Group A or Group B or Group C. They may be used to meet college requirements wherever a particular Group is specified in the "Freshman Programs" or in the "Requirements for a Bachelor's Degree."

The offerings in General Education are under the supervision of a committee which reports to the Academic Council. The present committee consists of Mr. Bumer, chairman, Mr. Cohen, Mr. Nunnemacher and Mr. Reid.

Courses in General Education

General Education 10. An Introduction to Physical Science. This course covers fundamental and outstanding developments of both classical and modern physics and includes selected topics from chemistry and astronomy. The methods and procedures of science as exemplified by physics are emphasized, and considerable attention is given to historical background and the effect of science on man's thought and life. The laboratory periods are devoted to demonstration, discussion, criticism, and evaluation and to a series of selected experiments which are carried out by the students. No attempt is made to develop special competence in laboratory techniques.

Open to freshmen. Primarily for non-science majors. Classified as a Group A course.

Through the year. M. W. F., 10; Tu., 2. Mr. Roope

General Education 14. Europe and the United States Since 1500. A survey of political, economic and intellectual trends since the Renaissance, designed to promote an understanding of the origin and development of the problems of the modern world.

The first semester treats the sixteenth, seventeenth and eighteenth centuries; the second semester, the nineteenth and twentieth centuries.

A class fee of one dollar for each member of the class is charged for supplies and duplicate library copies of books.

Open to freshmen. Classified as a Group B course.

Through the year. Tu. Th., 9; F., 1.

Mr. Lee and Mr. Campbell
Assisted by Mr. McKey

General Education 17. Great English and American Writers. Unlike English 15, which tries to present a comprehensive view of the whole field of English literature from *Beowulf* to the present, this course focuses the attention on six or seven major writers in each semester. The emphasis is placed, not on tracing literary movements or on studying literary problems *per se,* but on showing what these great figures have to say that is of interest or importance to the general reader today. The course seeks to determine the attitude toward life of each author, to see what gave rise to that attitude, and to evaluate it and compare it with the views of other writers treated in the course. Chronology as well as other purely factual material is kept to a minimum.

Meets requirement for a third semester of English in addition to English 11. Open to sophomores, juniors and seniors.

Divisible course. Either semester may be elected separately. Classified as a Group C course.

Through the year. Tu. Thu., 10-11:15. Mr. Bradley, first semester
Mr. Anderson, second semester

General Education 18. Literature and the Nature of Man. This course is designed to serve the general student by providing him with an opportunity to investigate ideas held by outstanding literary artists of the Western World concerning the nature of man and his relation to the universe. The works are also to be studied as representative of the cultures of which they are products.

The course is planned not only to introduce the student to a body of knowledge and experience held in common by educated men and women in our society, but also to help him to clarify his thinking concerning certain basic problems and to develop attitudes that are both humane and creative.

The subject matter undertaken includes Sophocles' *Antigone,* the *Book of Job,* the *Inferno* from Dante's *Divine Comedy,* Shakespeare's *Hamlet,* Milton's *Paradise Lost,* Molière's *Misanthrope,* Goethe's *Faust, Part I,* and selected poems of T. S. Eliot. All non-English works are read in translation.

Meets the requirement for a third semester of English in addition to English 11, but not the requirement in Fine Arts. Classified as a Group C course.

Open to sophomores, juniors, and seniors with the consent of the instructors.

Divisible course. Successful completion of first semester is normally required for admission to second semester.

Through the year. M. W. F., 11. Mr. Anderson, first semester
Mr. King, second semester

General Education 110. Fundamental Concepts of Elementary Mathematics. The subject matter of this course is exposed in terms comprehensible to students with no formal training in mathematics at the college level. It is hoped that the course will show the student how the abstract and general ideas of mathematics have implications for other fields of learning.

Open to juniors and seniors only. Classified as a Group A course.
Through the year. M. W. F., 10. Mr. Bumer
To be omitted in 1955-56.

General Education 143. The Theater in Western Civilization. An analysis of the theater as an art form as it is developed by specific cultural periods of the civilization of the West. Attention is paid to the contribution of other art forms to its growth and to the effect of intellectual and sociological trends on its content. The course has two aims: to give the student of the drama an insight into the technical aspects of theater and the problems facing the producer and designer, and to give the student of the theater an insight into the cultural background which has produced the drama.

First semester: Greek Theater; Mediaeval and Elizabethan Theater.

Second semester: The Age of the Baroque; Nineteenth Century and Modern Theater.

Open to upperclassmen with the consent of the instructor.

This course does not meet the requirement for a third semester of English, nor the requirement in Fine Arts. Classified as a Group C course.

Divisible course. Either semester may be elected separately.

Through the year. MR. EDWARDS
Omitted 1954-55.

American Civilization

AN INTERDEPARTMENTAL MAJOR

An "interdepartmental major" in the field of American Civilization is offered to candidates for the degree of Bachelor of Arts. The program required for the completion of this major is fully outlined under the earlier heading *Interdepartmental Majors.*

Department of Biology

PROFESSOR POTTER, ASSOCIATE PROFESSOR NUNNEMACHER
ASSISTANT PROFESSOR MACCHI, RESEARCH ASSOCIATE GATES

The biological laboratories are well equipped for the courses offered and contain special equipment for advanced investigations. Funds are available annually for the purchase and building of apparatus which may be required. The university library contains complete files of the more important periodicals and reference works. The department maintains an herbarium of over 50,000 sheets. Certain assistantships, fellowships and scholarships are available from time to time.

UNDERGRADUATE WORK

Biology 11 presents a comprehensive view which is prerequisite to all other courses in the department, except Biology 19a.

An undergraduate majoring in biology must complete Biology 11 and three advanced courses in biology, Chemistry 11, Physics 11, Mathematics 11, and at least one additional course in chemistry, physics or geology. Mathematics 11 does not count towards the fulfillment of the major requirements.

A candidate for honors in biology must take Biology 11, 12, 14 and 240.

THE PRE-MEDICAL PROGRAM

Clark University is justly proud of its pre-medical training program. Not only do our better students have little difficulty in entering the best medical schools, but they usually rank in the upper half of their medical school classes and become respected and outstanding physicians.

The student entering upon the pre-medical program must be prepared to compete with other college students of above-average ability; he must be of good health and capable of sustained hard work; he must like and get along well with all kinds of people and he must have a real desire to help the sick and advance the science of medicine. The pre-medical student must be prepared to undertake a program of intensive study which usually takes eight years before the medical degree can be obtained. During this time the large amount of class and laboratory work reduces considerably the opportunities for earning money through outside work.

While the requirements for the Bachelor of Arts degree assure each graduate familiarity with several fields of learning, the pre-medical student should take as many non-science courses as possible to round out his general education, because medical school programs leave no time for courses outside of their technical field. Courses in psychology and human relations will be of particular benefit.

The field of medicine is open equally to men and women.

The following programs are recommended for pre-medical students with a major in biology. Program A places the emphasis on biology; Program B places the emphasis on chemistry.

PROGRAM A

First Year
- English
- Foreign Language
- Mathematics
- General Biology
- Group B (one course)

Second Year
- Biology 12
- General Chemistry
- Foreign Language
- Group B (one course)
- ½ course in English and ½ course in Fine Arts

Third Year
- Biology (two advanced courses)
- Chemistry 13
- Physics 11
- Two electives

Fourth Year
- Biology 240
- Chemistry 15
- Three electives

PROGRAM B

First Year
- English
- Foreign Language
- Mathematics
- General Chemistry
- Group B (one course)

Second Year
- Chemistry 13
- Chemistry 14a and 14b
- General Biology
- Foreign Language
- Mathematics 12

Third Year
- Chemistry 15a and 15b
- Biology 12
- Physics 11
- Group B (one course)
- One elective

Fourth Year
- Chemistry 19
- Biology (two advanced courses)
- ½ course in English and ½ course in Fine Arts
- One elective

GRADUATE WORK

Students whose records are approved by the department may be admitted by the Graduate Board for work leading to the degree of Master of Arts.

Courses in Biology

During the academic year 1954-55 the following courses were given: 11, 12, 13, 14, 17, 18, 202, 205, 220, 221, 223b, 240, 241, 242, 260, 261, 300, 320, 340, 350 and 360.

1. PRIMARILY FOR UNDERGRADUATES

11. *General Biology.* An introduction to the fundamental principles and problems of biology.

Divisible course upon approval by the department.

Open to freshmen.

Through the year. M. W. F., 11; M., 2.

MR. POTTER AND MR. NUNNEMACHER

12. *Comparative Anatomy.* A study of the morphology of the vertebrates from a comparative standpoint which traces the evolution of animals from fish to mammals.

Lectures and laboratory work.

Through the year. Tu. Thu., 8; Tu. F., 2. MR. NUNNEMACHER

13. *Seminar in General Biology.* Credit is not given for this course. All students in the department are invited to attend and to participate. STAFF OF THE DEPARTMENT

14. *Botany.* First semester, morphology and taxonomy of the lower plants. Special emphasis is given to the algae and fungi.

Second semester, systematic botany of the higher plants with special emphasis on our local flora. A collection of one hundred plants is required, also a spring program of laboratory work in the field of at least three days' duration.

Either semester of the course may be elected separately.

Prerequisite: Biology 11, first semester.

Through the year. T. Th., 10; W. 2. MR. POTTER

15. *Invertebrate Zoology.*

Omitted 1954-55.

17. *General Animal Ecology.* An introductory study of the distribution of animals and the controlling physical factors, animal interrelationships, plant-animal associations and adaptations to such a wide variety of environments as fresh water, the ocean, sand dunes, meadows and woodlands. MR. NUNNEMACHER

Offered Summer 1954.

18a. *Genetics.* An introduction to the principles of genetics. Half course. First semester. T. Th., 12:45. MR. POTTER

19a. *Human Anatomy and Physiology.* An introductory semester course. Does not require Biology 11 as a prerequisite but requires Biology 11 to be counted towards the Group A requirement. May not be counted toward the fulfillment of the requirements for a major in biology. Three lectures per week.

Omitted 1954-55. MR. NUNNEMACHER

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

201. *Advanced Systematic Botany.* Through the year. Three laboratory periods and one lecture per week. Either semester may be taken separately. MR. POTTER

Omitted 1954-55.

202. *Economic Botany.* MR. POTTER

204b. *Bacteriology.* An introduction to the study of bacteriology.
Half course. Second semester. M. W. F., 11. MR. POTTER
Omitted 1954-55.

205. *Advanced Genetics.*
Three lectures per week.
Half course. Second semester. MR. POTTER

219. *Entomology.* Fundamentals of insect life.
Three lectures and one laboratory period per week.
Half course. Second semester. MR. POTTER
Omitted 1954-55.

220a. *Histology.* A comprehensive course dealing with tissue structure. Emphasis is placed on the study of mammalian tissues. Two lectures and two laboratory periods per week.
Half course. First semester. Tu. Th., 11. MR. NUNNEMACHER

221b. *Embryology.* A consideration of the fundamentals of embryology. Two lectures and two laboratory periods per week.
Half course. Second semester. Tu. Th., 11. MR. NUNNEMACHER

223b. *Parasitology.* An introduction to the parasitic mode of life of the protozoa, helminthes, and arthropoda and their relation to mankind. MR. POTTER AND MR. NUNNEMACHER
Half course. Second semester.

224b. *Neuro-anatomy.*
Three lectures per week. MR. NUNNEMACHER

240. *General Physiology.* Open to students who satisfy the instructor as to their preparation. The principal types of functioning characteristic of living organisms are considered in the light of their physio-chemical determinants.
Through the year. Tu. Th., 10; and two laboratory periods per week. MR. MACCHI

241b. *Endocrinology.* A study of the ductless glands and their relation to behavior.
Half course. Second semester. MR. MACCHI

242. *Advanced Physiology.* Given through the year. Three lectures per week first semester and three laboratory periods per week second semester.
Through the year. Tu. Th., 9; laboratory hours to be arranged.
MR. MACCHI

243a. *Circulation and Respiration.* A consideration of theoretical concepts and experimental findings concerning circulation and respiration in mammals.
M. W., 10; 2 Labs — MR. MACCHI

244. *Biochemistry.*
First semester. Three lectures per week. — MR. MACCHI

260. *Special Problems.* Advanced semi-independent study of an approved topic under the direction of a member of the staff.
Hours and credit to be arranged. — STAFF OF THE DEPARTMENT

261. *Microtechnique.*
Through the year. — MR. NUNNEMACHER AND MR. POTTER

3. PRIMARILY FOR GRADUATE STUDENTS

300. *Readings and Research in Botany.*
Credit to be arranged. — MR. POTTER

301b. *Plant Morphology.*
Credit to be arranged. — MR. POTTER

320. *Readings and Research in Zoology.*
Credit to be arranged. — MR. NUNNEMACHER

340. *Readings and Research in Physiology.*
Credit to be arranged — MR. MACCHI

342b. *Enzymology.*
Second semester. Two lecture and two laboratory periods per week.
MR. MACCHI
Omitted 1954-55.

350. *Advanced Studies in Biology. Seminar.*
Tues. 4-6. — STAFF OF THE DEPARTMENT

360. *Thesis.*
Credit to be arranged. — STAFF OF THE DEPARTMENT

Business Administration

ASSOCIATE PROFESSOR HARGEST, ASSOCIATE PROFESSOR MELDER,
ASSISTANT PROFESSOR KELLEY,* ASSISTANT PROFESSOR NORDSTROM,
ASSISTANT PROFESSOR COLLAZZO, LECTURER BREEN,
TEACHING FELLOW ONORATO

With the assistance of the staffs of the cooperating departments: Economics and Sociology, English, Geography, History, Mathematics and Psychology.

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*On leave of absence 1954-1955.

A description of the program in Business Administration and a statement of the requirements for the degree of Bachelor of Business Administration will be found under the general heading "The Undergraduate Colleges" and the special heading "The Division of Business Administration."

The courses in Business Administration and related subjects which are included in the program for the degree of Bachelor of Business Administration are listed alphabetically in the following pages under the headings: Accounting, Economics, English and Public Speaking, Geography, History and Government, Management, Marketing, Mathematics, Psychology, and Statistics.

Courses in Business Administration

Courses in *Business Administration* are classified as follows:

Course number	Classification	Course number	Classification
10a	Marketing	128	Accounting
10b	Management	129	"
13	Math. and statistics	181	Management
14	English and pub. speaking	182	"
16	Math. and statistics	183	"
17	English and pub. speaking	20	"
18	Management	23	Marketing
109	Marketing	27	"
112	Management	203	"
117	Accounting	227	Accounting
124	Marketing	237	"
125	"	220	Management
127	Accounting		

In 1953-54 the following courses were given: 10, 13, 14, 16, 17, 18, 109, 112, 117, 127, 128, 181, 182, 183, 20, 23, 220, 227.

Students should note that the following courses may not be counted for credit toward the degree of Bachelor of Arts: Business Administration 13, 14b, 17, 109, 125, 128, 129a, 181a, 182b, 23, 227, 237.

ACCOUNTING

Business Administration 117. Principles of Accounting. The organization and use of financial records, with emphasis on their interpretation as well as on the techniques of procedure.

Indivisible course.

Required of freshmen in the Business Administration program.

Through the year. Tu. Th., 8; Tu. Th., 3-5. Mr. Hargest
Assisted by Mr. Onorato

Business Administration 127. Intermediate Accounting. A study of generally accepted accounting principles and procedures and their application to asset, liability and proprietorship accounts. The analysis of financial statements, including statements from incomplete data and the statement of application of funds. Emphasis is placed upon problem analysis and solution.

This course may be entered at beginning of the second semester, but credit will not be given until both semesters have been completed.

Indivisible course.

Through the year. M. W., 11-12:15. MR. HARGEST

Business Administration 128a. Elementary Cost Accounting. A study of the basic principles of cost accounting and their application to the job order cost system. Especial consideration is given to the accounting for material, labor and manufacturing expenses and to the preparation of financial statements.

Half course. First semester. MR. HARGEST

Omitted 1954-55. Offered in alternate years.

Business Administration 128b. Advanced Cost Accounting. A study of the principles and procedures used in process, estimated and standard cost accounting systems. Consideration is given to the accounting for by-products, joint products and methods of accounting for work in process inventories. The preparation of financial statements and cost reports for managerial control is emphasized.

Half course. Second semester. MR. HARGEST

Omitted 1954-55. Offered in alternate years.

Business Administration 129a. Federal Tax Accounting. A basic course in the fundamentals of federal income and social security taxes with major emphasis upon the preparation of returns.

Half course. First semester. T. Th., 9; F., 1 MR. HARGEST

Offered in alternate years.

Business Administration 227a. Auditing. After an analysis of the purpose and scope of the several classes of audits, the course deals with (1) professional ethics (2) auditing standards (3) internal control systems (4) audit procedures applicable to asset, liability and proprietorship accounts, and (5) the use of worksheets and the preparation of statements and reports.

Half course. First semester. MR. HARGEST

Offered in alternate years. Omitted 1954-55.

Business Administration 237a. Branches, Consolidations, Mergers and Bankruptcy Accounting. The principles and problems encountered in home office and branch accounting; parent and subsidiary accounting; major-minor and reciprocal holding company relationships; financial and operating statements of consolidated companies; accounting for "sick business"; equity receiverships, statement of affairs; bankruptcy; the statement of realization and liquidation.

Half course. First semester. T. Th., 10-11:15. MR. HARGEST
Offered in alternate years.

Business Administration 237b. Governmental, Institutional and Estate Accounting. The principles and problems encountered in accounting for the budget, revenues, appropriations and expenditures for the several funds used by governmental units and institutions. Accounts of the executor, administrator or trustee of an estate, and the related charge and discharge statements.

Half course. Second semester. T. Th., 10-11:15. MR. HARGEST
Offered in alternate years.

ECONOMICS

See also announcement of the Department of Economics and Sociology.

Economics 11. Principles of Economics. Required for the degree of Bachelor of Business Administration.

Economics 13. Money and Banking. Required for the degree of Bachelor of Business Administration.

Economics 15a. Public Finance.
Economics 19b. Economics of National Security.
Economics 21. Business Cycles.
Economics 22. Labor Economics and Labor Problems.
Economics 25b. Problems in Public Finance.
Economics 26. Government and Industry.
Economics 205a. Intermediate Economic Theory.
Economics 206b. Economics of Industry.
Economics 207. International Economics.

ENGLISH AND PUBLIC SPEAKING

English 11. Composition and Literature. The first semester is required of freshmen in the Business Administration program.

Business Administration 14b. Business English. A course in English composition designed to train the student in the preparation of reports, letters, etc., used in business.

Required of freshmen in the Business Administration program.
Half course. Second semester. M. W. F., 10 MR. ILLINGWORTH

Business Administration 17a. Public Speaking. A course in the fundamentals of public speaking including the more common speech situations such as speech of introduction, address of welcome, expository and impromptu speeches; problems in human relations; voice tests, vocabulary drill.

Required for the degree of Bachelor of Business Administration.

Half course. First semester. M. W. F., 9. Mr. Illingworth

Business Administration 17b. Public Speaking. Parliamentary procedure, open forum, panel discussion, committee meetings, reports, extemporaneous speaking.

Prerequisite: Business Administration 17a.

Half course. Second semester. M. W. F., 9. Mr. Illingworth

GEOGRAPHY

See also announcement of the Department of Geography

Geography 10. Principles of Geography.

Geography 16. Economic Geography.

HISTORY AND GOVERNMENT

See also announcement of the Department of History and International Relations

Government 15. Introduction to Government.

Required for the degree of Bachelor of Business Administration.

General Education 14. Europe and the United States Since 1500.

MANAGEMENT

Business Administration 10b. Elements of Production. A survey of the production function in business, giving special emphasis to an exposition and theoretical evaluation of current practices in the fields of plant location, building and equipment selection, product and process development, maintenance, and methods of manufacture.

Required of freshmen in the Business Administration program.

Half course. Second semester, M. W. F., 9. Mr. Nordstrom

Business Administration 18. Business Organization and Finance. A course in the financial structure of modern industry with emphasis on the nature of the business corporation, its financial practices, types of securities, capital structure, financial reorganization, and the problems of internal financial control.

Required for the degree of Bachelor of Business Administration.

Through the year. Tu. Th., 10-11:15. Mr. Hund

Business Administration 112. Introduction to Personnel Management. A survey of the policies, practices and theory underlying the management of manpower in Industry. Representative topics studied are employee selection, training, promotion and transfer, wage payment and morale. Research into actual industrial situations is included in the second half.

Through the year. M. W., 11-12:15. Mr. Nordstrom

Business Administration 181a. Industrial Management. A study of the techniques of the executive control of manufacturing operations with special reference to such fields as specialization of labor, simplification and diversification of products, expansion, control of factors of production, and internal organization. The case method is used to a large degree.

Half course. First semester. M. W. F., 10. MR. NORDSTROM

Business Administration 182b. Techniques of Managerial Control. This course emphasizes those techniques by which information is communicated most efficiently in a business organization to achieve both high efficiency and high morale. This includes a survey of the contribution of office management to the efficient storing and communication of information for control purposes.

Half course. Second semester. M. W. F., 10. MR. NORDSTROM

Business Administration 183. Industrial Relations. The subject matter of the course is management-employee relationships with special reference to union and management bargaining. Opportunity for development of perspective and judgment as regards problems of management in shop industrial situations and under the law of labor relations is provided. Discussion and case methods are employed.

Through the year. W. F., 11-12:15. MR. MELDER

Business Administration 20. Business Law. A study of the legal basis of business and the principles of statutory and common law as they affect business relationships; covering such subjects as contracts, property, sales, negotiable instruments and agency.

Indivisible course.

Required for the degree of Bachelor of Business Administration.

Through the year. M. W. F., 8. MR. BREEN

Business Administration 220. Analysis of Business Problems. A course in the analysis of specific problems of administration and policy making. The course is designed to integrate the principles covered in more specialized courses in Business Administration in order that the student may acquire an appreciation of the broad business picture, while developing his ability to view business and economic problems from an over-all standpoint.

Required of seniors in the Business Administration program.

Indivisible course.

Through the year. M. W., 2-3:15. MR. COLLAZZO

MARKETING

Business Administration 10a. Elements of Distribution. An introduction to the study of business activities involved in the flow of goods and services from producer to consumer. Required of freshmen in the business administration program.

Half course. First semester. M. W. F., 9. Mr. Collazzo

Business Administration 109b. Sales Management. A course designed to give the student experience in analyzing sales problems, arriving at practical solutions, and defending these solutions. Sales administration, operation, control, promotion, and policies are studied during the course.

Half course. Second semester. M. W. F., 10. Mr. Collazzo

Business Administration 124. Principles of Marketing. An analysis of the institutions and processes involved in the distribution of goods and services, including a study of consumer motivation, retailing and wholesaling institutions, and marketing policies and practices. Attention will be given to study and discussion of actual marketing problems.

Half course. Mr. Kelley

Omitted 1954-55.

Business Administration 125a. Retailing Principles. A survey of the major phases of retailing including discussions of the retailer in our economy, the store and its organization, aspects of buying and selling, operating activities and personnel, and retail control.

Half course. First semester. M. W. F., 10. Mr. Collazzo

Business Administration 23a. Advertising. An introduction to the principles and practices of advertising. The emphasis is on the use of advertising as a tool of marketing. Topics studied include the economic functions of advertising, advertising research, media selection, advertising organizations, and testing.

Half course. First semester. Mr. Kelley

Offered in alternate years. Omitted 1954-55.

Business Administration 23b. Salesmanship. A study of the basic principles and problems of modern salesmanship; functions of sellers, basic knowledge needed in selling, and specialized sales problems.

Half course. Second semester. Mr. Kelley

Offered in alternate years. Omitted 1954-55.

Business Administration 27a. International Trade and Finance. A study of the nature, theoretical basis, methods of financing and government control of the international movement of goods.

Half course. First semester.

Omitted 1954-55.

Business Administration 203b. Marketing Research. A study of the types of problems faced by business executives in marketing and the ways in which the methods of scientific business research can be used for their solution.

Half course. Second semester. M. W. F., 9. Mr. Collazzo

MATHEMATICS AND STATISTICS

Business Administration 13. Business Mathematics. An elementary course designed to give the necessary foundation for an understanding of the basic processes involved in business transactions.

Required of freshmen in the Business Administration program.

Through the year. M. W. F., 11. Mr. Stubbe

Business Administration 16. Business Statistics. This course is designed to give the student a knowledge of the basic statistical techniques and procedures as they are applied to business and economic data. Lectures and laboratory exercises.

Indivisible Course. Required for the degree of Bachelor of Business Administration.

Through the year. Tu. Th., 9 and Tu., 2.

Mr. Nordstrom and Mr. Hargest

Mathematics 11. Freshman Mathematics.

Mathematics 17. Mathematical Statistics.

PSYCHOLOGY

See also announcement of Department of Psychology

Psychology 11. General Psychology.

Psychology 190b. Industrial Psychology.

Department of Chemistry

Professor Bullock, Professor Martell, Associate Professor
Kegeles, Assistant Professor Sugihara,
Instructor Drevinsky, Instructor Chaberek

Courses in chemistry fall into two groups:

First, those primarily for undergraduates. These furnish a foundation for professional work in chemistry or medicine, and are suitable for students desiring some knowledge of the subject as part of their general education.

Second, those primarily for graduate students.

UNDERGRADUATE WORK

Students who intend to become professional chemists or to study for an advanced degree in chemistry should major in chemistry and take at least two years' work in physics.

They should normally conform closely to the schedule given below. However, an outstanding student may elect an accelerated program leading to advanced work in the junior and senior years.

REPRESENTATIVE FOUR YEAR CURRICULUM IN CHEMISTRY

First Year
- English 11
- German 11 (or French 11)
- Chemistry 11
- Mathematics 11
- Elective, Group B

Second Year
- Chemistry 13
- Physics 11
- Mathematics 12
- German 12 (or French 12)
- Elective, Groups B, C, or D

Third Year
- Chemistry 14a and 14b
- Chemistry 15
- German 13 (or French 14)
- Two of the following:
  - Mathematics 13, Physics 15, Physics 16, Physics 18, Physics 124, French 11 or German 11, Geology, Biochemistry, Biology, Groups B, C, or D.

Fourth Year
- Chemistry 19
- Two full courses from the following list:
  - Chemistry 112b or 116, Chemistry 212b, Chemistry 215, Physics 15, Physics 17, Physics 22, Physics 23, Biology, Mathematics, French 12 or German 12.
- Electives, Group B, C, or D.

A student who satisfies the Department of Chemistry as to outstanding qualifications may elect Chemistry 13, Organic Chemistry, in place of Chemistry 11 in the freshman year. Chemistry 19 is required of all chemistry majors and is essential for work in physiology. Three years of mathematics are recommended as preparation for Chemistry 19 and for graduate work in chemistry. The same amount of mathematics is strongly recommended for all who elect chemistry as a major, and for all who expect to become professional chemists.

For professional work in chemistry, at least one year of graduate study is highly desirable.

Students who consider the possibility of later graduate study in chemistry are advised to secure a reading knowledge of both French and German in order to anticipate the requirements for higher degrees in most graduate schools.

Students who intend to enter the field of secondary education should acquaint themselves with the requirements in "education" of state and local licensing boards and prepare to meet these requirements. This may necessitate the omission of certain elective courses scheduled for the third and fourth years.

In most colleges, premedical students major in chemistry. Program B, outlined in the announcement of the Department of Biology, lists the courses most suited for preparation for all "Class A" medical schools. The special advantage of this program is the inclusion of Chemistry 19 (Physical Chemistry), necessary preparation for physiology.

Attention is called to laboratory fees and breakage deposits listed under the general heading "The Undergraduate Colleges" and the special heading "Fees and Expenses."

GRADUATE WORK

The Department of Chemistry offers advanced courses in the fundamental principles of physical, organic, inorganic, radiochemistry and analytical chemistry, and these are supplemented by specialized courses and research work in physical and organic chemistry and radiochemistry. The graduate program is designed to lead to the degrees of Master of Arts and Doctor of Philosophy. Besides a successful completion of the fundamental courses offered in the graduate school, candidates for both degrees must show facility in conducting a laboratory investigation and a command of the subject which is chosen for the thesis or dissertation.

All graduate students are required to have an adequate reading knowledge of French and German in order to be accepted for candidacy for the Ph.D. degree.

Students registered for advanced degrees are expected to spend not less than eighteen hours per week in the laboratory. This may include special laboratory work in radiochemistry, organic, inorganic, and physical chemistry.

Graduate scholarships and fellowships are available to students in this department. Further information may be obtained from the chairman of the department.

Courses in Chemistry

During the academic year 1954-55, the following courses were given: 11, 13, 14a, 14b, 15, 19, 116, 215, 300, 322, 323, 330, 331, 340, 341, 350, 360, 361, 380.

In 1955-56 the following courses will be offered: 11, 13, *14a, *14b, *15, 19, 112b, 116, 212b, 215, 300, 310, 311, 320, 321, 332, 333, 342, 344, 350, 380.

1. PRIMARILY FOR UNDERGRADUATES

11. *General Chemistry.* Systematic study of the elements and their principal compounds and the fundamental laws and theories of chemistry. Three lectures and three hours of laboratory work per week.
Prerequisite for all other courses in chemistry.
Divisible only by consent of instructor.
Through the year. M. W. F., 10; Tu., 2-5 or Th., 2-5.
MR. DREVINSKY

13. *Organic Chemistry.* Lectures on the principles of organic chemistry and a laboratory study of the preparation and properties of important organic compounds. Three lectures and three hours of laboratory per week.
Prerequisite: a grade of C—, or better in Chemistry 11.
Through the year. M. W. F., 9; M., 2-5. MR. BULLOCK

*14a. *Gravimetric Analysis.* Required for a major in chemistry. Chiefly laboratory work.
Prerequisite: Chemistry 11.
Half course. First semester. F., 10; Tu. F., 2-5. MR. BULLOCK

*14b. *Volumetric Analysis.* Required for a major in chemistry. Chiefly laboratory work.
Prerequisite: Chemistry 11.
Half course. Second semester. F., 10; Tu. F., 2-5. MR. BULLOCK

*15. *Chemical Principles.* An introduction to the fundamental principles of modern chemistry including a systematic study of gases, liquids, solids, solutions, equilibria, electrochemistry, atomic structure, valence and radioactivity. Special emphasis on the principles of chemistry applicable to biological systems.
Prerequisite: Chemistry 13.
Through the year. M., 1; Tu. Th., 10; Th., 2-5. MR. SUGIHARA

**Note—in 1955-56 Chemistry 14a and 14b will be combined with Chemistry 15 as a 1½ credit course.*

19. *Physical Chemistry.* Principles of physical chemistry including gases, liquids, solutions, crystalline solids, chemical thermodynamics, homogeneous and heterogeneous equilibria, electrolytic conductance and transference, electromotive force, reaction kinetics, colloids.
Required for a major in chemistry.
Three hours of lectures and three hours of laboratory per week.
Prerequisites: Chemistry 15, 14b, Mathematics 12, Physics 11. Mathematics 13 is strongly recommended.
Through the year. Tu. Th., 10; M., 2; F., 2-5. MR. KEGELES

112b. *Physico-Chemical Methods.* An advanced laboratory course in physical chemistry. Registration limited.

Open to students who have taken or are taking Chemistry 19.

One lecture and six hours of laboratory work per week.

Half course. Second semester. Tu. Th., 2. MR. KEGELES

116a. *Organic Qualitative Analysis.* Prerequisite: Chemistry 13. One lecture and six hours of laboratory work per week.

First semester. Tu. Th., 2-5; Th., 11. MR. BULLOCK

116b. *Advanced Organic Synthesis.* Prerequisite: Chemistry 13.

One lecture and six hours of laboratory work per week.

Second semester. Tu. Th., 2-5; Th., 11. MR. BULLOCK

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

212b. *History of Chemistry.* Outline of historical development of the science, and the relation of chemistry to other sciences at various periods of development. Lectures, collateral reading, reports and thesis.

Open to graduate students and seniors who take or have taken Chemistry 13 and 19 or equivalent courses.

Half course. Second semester. Tu. Th., 11. MR. BULLOCK

Omitted 1954-55.

215. *Honors Course.* Primarily for candidates for "honors in chemistry." STAFF OF THE DEPARTMENT

All courses listed below are semester courses except 300, 350, and 380, given through the year.

300. *Research* THE STAFF

310. *Molecular Structure.* Theories of electronic structure and relationship between chemical binding and physical properties of various substances. Dipole moments, magnetic properties, bond energies and stereochemistry of organic and inorganic compounds.

MR. MARTELL

311. *Reaction Mechanisms.* Electronic interpretations of chemical reactions, acid-base concepts and solution catalysis, free-radical and ionic mechanisms. MR. MARTELL

Chemistry 310 and 311 offered together in alternate years.

Omitted 1954-55.

320. *Advanced Physical Chemistry.* Selected topics in physical chemistry described in detail: introduction to thermodynamics, phase rule, chromatography, electrochemistry, Debye-Hückel theory.

MR. KEGELES

321. *Colloid Chemistry.* Osmotic and sedimentation equilibrium. Sedimentation velocity; diffusion. MR. KEGELES

Chemistry 320 and 321 offered together in alternate years.

Omitted 1954-55.

322. *Thermodynamics.* Applications of classical thermodynamics to chemical systems.
First semester. W. F., 10. MR. KEGELES

323. *Statistical Mechanics.* Statistical mechanical analogs of thermodynamic functions and their application to chemical systems.
Second semester. W. F., 10. MR. KEGELES
Chemistry 322 and 323 offered together in alternate years.

330. *Advanced Organic Chemistry.* Effects of functional groups on synthesis.
First semester. T. Th., 10. MR. BULLOCK

331. *Organic Chemical Reactions.* Lectures on the fundamental reactions in organic chemistry.
Second semester. T. Th., 10. MR. BULLOCK
Chemistry 330 and 331 offered together in alternate years.

332, 333. *Heterocyclic Compounds.*
Chemistry 332 and 333 offered together in alternate years.
Omitted 1954-55. MR. BULLOCK

340. *Quantum Chemistry.* Elementary wave mechanics, application to atomic spectra, kinetic theory and statistics, molecular spectra, crystalline solids, imperfect gases and liquids.
First semester. T. Th., 11. MR. SUGIHARA

341. *Advanced Inorganic Chemistry.* Periodic classification of many-electron atoms, chemical and physical properties of atoms and simple ions as functions of electron structure, solid state chemistry, solvents and solution phenomena.
Second semester. T. Th., 11. MR. SUGIHARA
Chemistry 340 and 341 offered together in alternate years.

342. *Radiochemistry.* Fundamentals of nuclear physics, including nuclear structure, modes of radioactive decay, interaction of nuclear particles with matter. Radiochemical techniques of production, isolation, and identification of radioactive atoms, introduction to techniques of preparation and measurement of radioelements, applications to problems in chemistry and physics. MR. SUGIHARA
Omitted 1954-55.

343. *Principles of Analytical Chemistry.* Theories of titrations, indicators, and pH measurement, titration in non-aqueous solvents, equilibrium theory of chromatography, ion-exchange resins, solvent extraction, theories of gravimetric analysis, principles of some instrumental analytical methods. MR. SUGIHARA
Omitted 1954-55.

344. *Chemistry of Less Familiar Elements.* Lectures on the inorganic and physical chemistry of elements not ordinarily studied in undergraduate courses, analytical methods, kinetics, equilibrium constants. MR. SUGIHARA

Chemistry 342 offered in alternate years together with either Chemistry 343 or Chemistry 344.

Omitted 1954-55.

350. *Seminar.* Reports on research work being performed in the laboratory and reports and discussions of recently published work in related fields. STAFF AND GRADUATE STUDENTS

360. *Coordination Compounds.* Lectures on the chemical properties of metal complexes, with emphasis on recent developments in the field of metal chelate compounds.

First semester. M. W., 3. MR. CHABEREK

361. *Principles of Instrumental Analysis.* A study of the principles involved in the use of analytical instruments, including potentiometry, infrared and ultraviolet absorption spectrophotometry, and polarography.

Second semester. M. W., 3. MR. CHABEREK

380. *Current Topics in Chemical Literature.*

STAFF AND GRADUATE STUDENTS

Department of Classics

ASSOCIATE PROFESSOR BARLOW

The Department of Classics provides undergraduate courses for the acquisition of a reading knowledge of Greek and Latin and for the study of Greek and Latin literary masterpieces in their original form. Advanced courses providing a major in Classics are offered from time to time as the need arises. In addition to the courses requiring knowledge of an ancient language, there are others given entirely in English, which deal with all phases of the Greek and Roman civilizations.

Since it may not be possible to offer courses in elementary Latin and Greek every year, students who desire to elect them should consult the instructor as far in advance as possible.

During the academic year 1954-55 the following courses were given: Greek 11, 123a; Latin 11, 13, 15, 123b.

1. PRIMARILY FOR UNDERGRADUATES

GREEK

11. *Elementary.* Study of Greek grammar through forms, syntax, vocabulary, and reading; selections from Xenophon's Anabasis.
Indivisible course.
Open to freshmen.
Through the year. Tu., 12:35-1:50; Th., 1-2:15. MR. BARLOW

12. *Plato, Apology and Crito; Homer, Iliad.*
Prerequisite: Greek 11.
To be offered in 1955-56.

13. *Greek Drama.* Prerequisite: Greek 12 or equivalent.
Course not regularly offered. MR. BARLOW

123a. *Greek Civilization.* Lectures and readings on the history, literature, philosophy, art, religion, and government of Greece, with emphasis on the elements which have contributed most to Western civilization. Given in English.

Greek 123 may be counted in fulfillment of the general requirement in art, music, and literature (Group D), but not in fulfillment of the requirement in foreign language.
Open to freshmen.
Half course. First semester. W. F., 11-12:15. MR. BARLOW

LATIN

11. *Elementary.* Introduction to the Latin language through study of forms, syntax, and vocabulary, with emphasis on the Latin element in English words. Reading of selections from Latin prose.
Indivisible course.
Open to freshmen.
Through the year. Tu. Th., 8:35-9:50. MR. BARLOW

12. *Cicero, Orations; Vergil, Aeneid.*
Prerequisite: Latin 11 or two years of Latin for admission.
Open to freshmen. MR. BARLOW
Omitted 1954-55.

13. *Selections from Horace and Catullus; Comedies of Plautus and Terence.* The work of the course may begin with easy prose selections, to satisfy the lack of uniformity in preparation in secondary schools.
Prerequisite: Latin 12 or three or four years of Latin for admission.
Open to freshmen.
Through the year. M. W. F., 9. MR. BARLOW

15. *Livy and Tacitus; Cicero, De Amicitia, and Lucretius.*
Prerequisite: Latin 13.
Through the year. T. F., 2-3:15.

17. *Roman Satire; Medieval Latin.*
To be offered in 1955-56.

19. *Survey of Latin Literature.*
Course not regularly offered. MR. BARLOW

123b. *Roman Civilization.* Lectures and readings on the history, literature, philosophy, art, religion, law, and government of ancient Rome, with emphasis on the transmission of Greek civilization, on the developments which have contributed to Western civilization, and on the condition of the Roman Empire during the early years of the development of Christianity. Given in English.

Latin 123 may be counted in fulfillment of the general requirement in art, music, and literature (Group D), but not in fulfillment of the requirement in foreign language.

Open to freshmen.
Half course. Second semester. M. W. F., 11. MR. BARLOW

Department of Economics and Sociology

PROFESSOR MAXWELL, ASSOCIATE PROFESSOR MELDER, ASSOCIATE PROFESSOR KILLIAN, ASSOCIATE PROFESSOR HARGEST, ASSISTANT PROFESSOR KELLEY,* ASSISTANT PROFESSOR NORDSTROM, ASSISTANT PROFESSOR HUND, ASSISTANT PROFESSOR VAN TASSEL, ASSISTANT PROFESSOR COLLAZZO, LECTURER BREEN

The first aim of the department, in its undergraduate courses, is to give the student a comprehensive grasp of the underlying principles and functions of our economic and social institutions, and to develop habits of systematic and unbiased thought about these institutions. Some of the courses, however, contribute to the student's preparation for a business or professional career (Economics 13, 15a, 22, 26, etc.) and are specifically recommended to students who are candidates for the degree of Bachelor of Business Administration. Conversely, some students majoring in economics may be advised to elect certain courses in Business Administration which are credited toward the degree of Bachelor of Arts (Business Administration 10, 16, 112, 117, 18, 124, 127, 20, 27a, 203, 220).

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*Absent on leave 1954-55.

Students who have an interest in Business Administration but prefer a program which is less intensive than that required of candidates for the degree of Bachelor of Business Administration may enroll as candidates for the degree of Bachelor of Arts with a major in economics. Such students should take the normal college program for freshmen and should elect *Business Administration* 10 for the Group B requirement. In the second year they should elect *Economics* 11 and *Business Administration* 117. In the third and fourth years they should elect courses in economics and in business administration in consultation with their advisers.

Economics 11 is a prerequisite to all other courses in economics. Similarly Sociology 11 is a prerequisite to other courses in sociology. Courses taken outside the department in partial fulfillment of the major requirement should be selected, subject to departmental approval, so as to provide a unified program centering about the student's major interest. Majors in economics will ordinarily be required to take Economics 205a, Intermediate Economic Theory, and also Economics 280a, Senior Comprehensive.

Candidates for departmental honors will engage in a program of independent study consisting of reading and research designed in part to give them specialized training in the fields of their major interest and in part to supplement formal courses. Ordinarily a student will not begin his independent study until the second semester of the junior year, nor will he undertake the equivalent of more than two courses in this manner.

Courses in sociology will be found listed, with descriptions, immediately after the list of courses in economics.

In making elections, students should bear in mind that some advanced courses are offered only in alternating years.

GRADUATE WORK

Students expecting to enter upon graduate work should have mastered creditably basic courses in economics equivalent to at least four courses, including Economics 11; those whose preparation is inadequate should expect to remove the deficiency before proceeding to study for a higher degree.

A range of courses sufficient for the needs of candidates for the doctorate is offered in cycles of two or three years. Individual work with instructors and in small intimate seminars constitutes a goodly part of the graduate student's program. The classification of courses as undergraduate, intermediate, and graduate is necessarily an elastic one. Graduate students electing courses in the undergraduate category will be required to do additional work.

Fellowships, scholarships, assistantships, and other aids are available to a limited number of worthy students.

Attention is directed to closely allied courses offered in geography, history and international relations, and psychology.

Courses in Economics

During the academic year 1954-55 the following courses were given: Economics 11, 13a, 13b, 15a, 140b, 21b, 22, 25b, 26, 28, 205a, 207, 211b, 260a, 280a, 39b, 311, 322, 325, 326, 327, 338.

Descriptions of courses listed below under the designation "Business Administration" will be found in the announcement of "Courses in Business Administration".

1. PRIMARILY FOR UNDERGRADUATES

11. *Principles of Economics.* An introduction to the fundamental economic principles, together with a study of the practical application of these principles to the problems of American life.

Indivisible course.

Through the year. Tu. Th., 10; a third hour to be arranged.

Mr. Van Tassel
Assisted by Mr. Miller

Business Administration 112. Personnel Management.

Business Administration 117. Accounting.

Business Administration 124. Marketing.

Business Administration 127. Intermediate Accounting.

13a. *Money and Banking.* The principles of money and banking; characteristics of the American monetary and banking system; theoretical relations of money, prices, income.

Half course. First semester. M. W. F., 10. Mr. Maxwell

13b. *Money and Banking.* Central banks, particularly the Federal Reserve System; monetary standards; theories of foreign exchange; monetary policy in the United States.

Prerequisite: Economics 13a or its equivalent.

Half course. Second semester. M. W. F., 10. Mr. Maxwell

140b. *Consumer Economics.* A study of family budgets, planes of living, and other problems arising in the purchase of the customary goods and services. Emphasis is upon housing, insurance, savings, investments, consumer services supplied by advertisers, private noncommercial agencies, the government, and the cooperative movement.

Half course. Second semester. Tu. Th., 8; F., 2. MR. MELDER

15a. *Public Finance.* The principles of governmental expenditures, revenues, and debts, with particular reference to the United States.

Half course. First semester. M. W. F., 9. MR. MAXWELL

Business Administration 16. Statistics.

Business Administration 18. Business Organization and Finance.

115b. *Fiscal Development of the United States.* This course treats the development of the functions and revenues of the federal government and of the state governments (with brief notice of municipalities). For the recent period most attention is given to federal-state fiscal interrelations in the form of federal grants-in-aid, tax conflicts and shared taxes. Recent proposals for a revision of federal-state fiscal relations both for the purpose of bringing federalism up to date and for implementing a high employment program are considered.

Prerequisite: Economics 11, or concurrent enrollment.

Half course. Second semester. MR. MAXWELL

Omitted 1954-55.

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

Business Administration 20. Business Law.

205a. *Intermediate Economic Theory.* An analysis of contemporary economic theory, with attention to consumer demand, production, factor demand, prices, market structure, and aggregate economics.

Half course. First semester. Tu. Th., 8; F., 2. MR. VAN TASSEL

Business Administration 203. Marketing Research.

207. *International Economics.* The first half of the course reviews the rise of an international economy, the theory which accompanied it and the monetary mechanisms and analysis which underlay its operation. The second half is concerned with problems created by national policies, wars, and depressions.

Through the year. Tu. Th., 2-3:15.

MR. MELDER AND MR. VAN TASSEL

21a. *Business Cycles.* Analysis of recurrent business fluctuations differentiating the typical business cycle and its phases. Treatment of the history, theories of causation and proposals for control of the business cycle.

Half course. First semester. Tu. Th., 11-12:15.

Omitted 1954-55.

21b. *National Income Analysis.* A study of national income accounts and analysis of depression, full employment and inflation under capitalism. Special emphasis on the work of J. M. Keynes and other contemporaries.

Half course. Second semester. M., 1-2:15; Th., 11-12:15
MR. VAN TASSEL

210a. *Economic and Social Reform.* A study of the development of economic institutions involved in society's attempt to solve its basic economic problems. General emphasis on free enterprise, planning and contemporary industrial organization oriented towards an improved understanding of the American economy.

Half course. First semester.
Omitted 1954-55.

211b. *Comparative Economic Systems.* An analysis of contemporary or recent industrialized economic systems such as capitalism, socialism, and fascism followed by a consideration of these systems as currently or recently found to exist in specific nations.

Half course. Second semester. Tu. Th., 8:35-9:50. MR. HUND

Business Administration 220. Analysis of Business Problems.

22. *Labor Economics and Labor Problems.* The first semester is devoted to a survey of the nature of labor economics and labor problems, including the several approaches of organized workers and employers to these problems. The second semester is concerned with the approach of government to labor force problems including industrial relations and social insurance.

Through the year. Tu. Th., 9; F., 1. MR. MELDER

231. *Economic History of the United States.* In the first semester, colonial agriculture, industry, commerce and finance are briefly treated, followed by the Revolution and the Constitution, financing the Revolution, economic development to the Civil War, economic background and consequences of the Civil War. In the second semester the main topics are economic developments in agriculture, transportation, population, labor, industry, finance, currency and banking.

Through the year. W. F., 11-12:15.
Omitted 1954-55. MR. MAXWELL AND MR. CAMPBELL

24b. *History of Economic Doctrine.* After a quick survey of ancient writers, attention will be given to Mercantilism and the doctrinal reaction from it as expressed by the Physiocrats and the Classical economists.

Half course. Second semester. Hours to be arranged.
Omitted 1954-55. MR. MAXWELL

25b. *Problems in Public Finance.* This course deals mainly with problems of post-war taxation and fiscal policy. The theory underlying the so-called "full employment" act of 1946 is discussed, along with methods by which it may be implemented. Other questions for examination are reform of the federal corporate income tax and death duties, incentive taxation, federal debt policy, the capital budget, federal budgetary procedure.

Half course. Second semester. M. W. F., 9. MR. MAXWELL

26. *Industrial Organization and Governmental Control.* An analysis of industrial organization and the resulting market structures followed by a consideration of the various forms of governmental regulation applied to this organization and structures. Case studies of selected industries are used as a tool in this analysis with emphasis on the appropriateness of existing governmental controls in specific industrial situations. The course is conducted on a seminar basis with emphasis on student participation.

Through the year. W., 1:30-4:30. MR. HUND

Business Administration 27a. International Trade and Finance.

28. *Research in Selected Economic Problems.* Includes departmental honors work and other individual projects completed for credit.

Hours as arranged. STAFF OF THE DEPARTMENT

280a. *Senior Comprehensive.* A survey designed to assist majors in integration of the field. Required for all senior majors.

Half course. First semester. Hours as arranged.

STAFF OF THE DEPARTMENT

29a. *Economics of Transportation.* A study of the development of the transportation system of the United States; its contemporary structure, importance, and economic aspects; the development of public control. Railway rate making and standards therefor; railway combinations and proposals for consolidation; railway labor problems.

Half course. First semester. Hours as arranged.

Omitted 1954-55.

3. PRIMARILY FOR GRADUATE STUDENTS

39b. *Economic Theory.* Analysis of the theories of representative economists. Most attention is given to Marshall, Chamberlin, Keynes.

Half course. Second Semester. Hours to be arranged.

MR. MAXWELL

311. *Seminar.* STAFF OF THE DEPARTMENT

Through the year. Hours to be arranged.

Research courses are offered to meet the needs of the individual students for work not presented in regularly scheduled courses.

322. *Research in Labor.* MR. MELDER

324. *Research in Marketing.* MR. KELLEY

325. *Research in Public Finance and Money and Banking.* Mr. Maxwell

326. *Research in Business Organization and Government Control of Business.* Mr. Hund

327. *Research in International Economics.* Mr. Melder

338. *Thesis.* Staff of the Department

Sociology

An undergraduate whose primary interest is in sociology may meet the departmental requirement for a major by completing Economics 11 and three or four courses in sociology together with three or two approved courses in related departments. History 10, 205 and 230, Psychology 200 and 203, and Government 15 are particularly recommended for this purpose.

GRADUATE WORK

Students expecting to enter upon graduate work should have mastered creditably basic courses in sociology equivalent to at least four courses, including Sociology 11; those whose preparation is inadequate should expect to remove the deficiency before proceeding to study for a higher degree.

A range of courses sufficient for the needs of candidates for the master's degree only is offered. Individual work with instructors and in small intimate seminars constitutes a goodly part of the graduate student's program. The classification of courses as undergraduate, intermediate, and graduate is necessarily an elastic one. Graduate students electing courses in the undergraduate category will be required to do additional work.

Fellowships, scholarships, assistantships, and other aids are available to a limited number of worthy students.

Attention is directed to closely allied courses offered in philosophy, geography, history and international relations, and psychology.

Courses in Sociology

During the academic year 1953-54 the following courses were given: 11a, 11b, 13a, 27a, 25b, 29.

1. PRIMARILY FOR UNDERGRADUATES

11. *Introductory Sociology.*

11a. *Principles of Sociology.* A consideration of the basic principles of sociology including the development of man; culture; culture and personality; social organization and structure; groups and group life; social relations; social norms; collective behavior; human ecology and population; socialization and social interaction; social disorganization and change; social institutions.

Prerequisite for further work in sociology.

First semester. Tu. Th., 8; a third hour to be arranged.

MR. KILLIAN
Assisted by MR. OSBORNE

11b. *Sociological Analysis.* An analytical and theoretical approach to the materials in 11a, with emphasis on the development of sociological ideas and their use in policy making and in problem analysis. Advanced readings will be used and an emphasis will be placed on social structure and change.

Prerequisite for further work in sociology.

Second semester. Tu. Th., 8; a third hour to be arranged.

MR. KILLIAN
Assisted by MR. OSBORNE

12a. *Introduction to Cultural Anthropology.* The evolution and development of man and his culture: Basic concepts; the races of man and their distribution; process of adaptation and adjustment through culture; primitive, historic and modern culture complexes compared; divergence, transmission, and function of culture; origin and growth of civilizations; contemporary pre-literate peoples; relationship of anthropology to the other social sciences.

Half course. First semester. Tu. Th., 2-3:15.

Omitted 1954-55.

12b. *Race and Nationality.* The meaning of race; the distribution of ethnic groups; ethnic group characteristics—biological and environmental theories. The meaning of nationality; early types of immigrants in America; the cultural backgrounds of the earlier Americans. American minority groups and problems—the Negro, the Jew and other minority groups. The effects of later immigration; immigration restrictions and the quota system; displaced persons and proposed legislative control measures; prospective future of the American population.

Half course. Second semester. Tu. Th., 2-3:15.

Omitted 1954-55.

13a. *Crime, Delinquency and Society.* Study of the explanations for crime and delinquency; history of punishment; other methods of control. Survey of the English and American criminal law and administration of criminal justice; development of penal and correctional methods including probation, parole, release procedures; the juvenile court. Proposals for youth courts and youth correction authorities. Emphasis on crime as a system of behavior. Proposals for dealing with crime and delinquency.
Half course. First semester. M. W., 11-12:15. Mr. Killian

16b. *Social Problems and Their Analysis.* A study of current social problems in the setting of social and cultural change; trends affecting the quantity and quality of problems; mobility, urbanization, secularization, individualization, population composition. A study, in this setting, of typical and selected problems such as dependency, personal maladjustment, group disfunction, institutional breakdown, minority groups and deviant behavior with particular reference to policy formation and institutional procedures.
Half course. Second semester. Mr. Killian
Omitted 1954-55.

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

21b. *The Family and Society.* A study of the form and function of the family at different culture levels; the influence of geographic, biological, demographic and cultural forces; secondary groups and the family; rural and urban family.
Half course. Second semester. Tu. Th., 11-12:15. Mr. Killian
Omitted 1954-55.

24b. *Community Organization.* The contemporary American urban and rural community in action. Nature and types of community; its place in history. Organization of communities in rural and urban life. Community studies and surveys. The constellation of community social agencies. The field of social work, recreation and welfare. Community chests and councils. Sociology and community organization.
Half course. Second semester. Mr. Killian
Omitted 1954-55.

25a. *Social Institutions.* Institutional theory: the history and development of major social institutions.

Social Control and Social Institutions. The basis of institutions in primitive experience: life functions and belief systems of primitive peoples; family and kinship systems as points of departure for institutional differentiation. Religious institutions: institutional aspects of religions in the historical contexts of Hebrew, Greek, Roman and modern experiences.

First semester. MR. KILLIAN

Omitted 1954-55.

25b. *Social Institutions. Legal Institutions.* Law and the social order: development of Western legal institutions; the normative content and analysis of legal institutions and law; relation to religious institutions; the legal tradition in Western society; law as a means of social control. Law, science and policy: law and its functions in modern times; the changing basis of legality; premises concerning man and his world in relation to law and its function. Sociology, anthropology and law: selected readings in theory and analysis of case materials.

Second semester. M. W., 11-12:15. MR. KILLIAN

27a. *Industrial Sociology.* A study of industrial society with special emphasis on the relationships among persons as members of the many groups included in this society and on the impact of social institutions on the character of the relationships studied. The formal and informal groups within the industrial form will be given attention as will the firm and community viewed as interacting organizations.

Half course. First semester. Tu. Th., 8:35-9:50. MR. HUND

28. *Research in Selected Sociological Fields.* Includes departmental honors work and other individual projects completed for credit.

Through the year. Hours as arranged.

See also: Economics 140b, 210a, 22.

29a. *Social Theory and Introduction to Sociological Concepts.* The development of man's ideas about social life, emphasizing the chief contributions from Plato and Aristotle to Herbert Spencer. The general progress of sociology since Spencer.

Half course. First semester. Tu. Th., 11-12:15. MR. KILLIAN

29b. *Advanced Sociological Theory.* A study of Sumner, Durkheim, Max Weber, and some recent concepts.

Half course. Second semester. Tu. Th., 10-11:15. MR. KILLIAN

3. PRIMARILY FOR GRADUATE STUDENTS

38. *Research.*

See also: Economics 311, 322.

Department of Education

PROFESSOR JONES, ASSOCIATE PROFESSOR BORGER, ASSISTANT PROFESSOR COFFEE, LECTURERS: HARRIMAN, KAVANAGH, AND SHEPHERD

With the cooperation of ASSOCIATE PROFESSOR WARMAN of the Graduate School of Geography, ASSISTANT PROFESSOR BECK of the Department of Philosophy, MR. GRANGER, Director of Physical Education for Men and MISS HUGHES, Dean for Women.

The department has as its primary objective the providing of professional study for teachers and prospective teachers in secondary schools. It offers work leading to the degree of Master of Arts in Education and specializes in instruction leading to that degree. Many of the regular courses are scheduled in the late afternoons to meet the needs of both full-time students in Education and in-service teachers.

UNDERGRADUATE WORK

A program of training for elementary school teaching was instituted for undergraduate students in 1953. This program is designed for juniors and seniors who have developed a strong and varied program of general studies in the first two years of college and who are interested in working with children of the age range of 10 to 14. The program includes not only the more essential courses in educational psychology, child study, and principles of teaching, but also a period of internship teaching in the senior year.

For undergraduate students interested in secondary school teaching as a career (and many Liberal Arts college graduates will be needed in this field), the department recommends high concentration upon the subject-matter fields in which they desire to teach, and suggests that they reserve for a fifth year the professional work in the theory and practice of education. In keeping with this general plan an undergraduate major in education is not offered.

GRADUATE WORK

The requirements for the degree of Master of Arts in Education cannot be adequately stated in terms of courses to be taken, because the evaluation of the work of each student will be made on the basis of achievement rather than on the basis of courses completed. However, the minimum essentials in terms of course requirements are outlined below.

Course requirements. The student is expected to elect one of the following groups of studies as the field in which he wishes to teach:

(a) Mathematics and natural sciences
(b) History, geography, and economics
(c) Ancient and modern foreign languages
(d) English, alone or in combination with some related subject.

Prior to receiving the degree, the candidate must have completed in undergraduate and graduate study combined not less than five year-courses in one of the above groups, or in a combination of groups approved by the Department of Education. At least two semester-courses in a subject-matter field must be taken as a part of the study in residence for the advanced degree and must be passed with a grade satisfactory for graduate credit. In addition to the above requirement in the subject-matter field, eight semester-courses of graduate work in education will normally be required. The program of courses to meet these requirements must be approved in advance by the Department. Changes in the proportion of education and subject-matter courses may be made by the Department on the basis of the candidate's previous training. Work, additional to the above requirements, either in the subject-matter field or in education, or both, may be required if this seems necessary for the adequate preparation of the candidate.

Internship Teaching. The Department provides opportunities for internship teaching under supervision for all graduate students majoring in Education. For graduate students of the Department who have not had teaching experience, satisfactory work in internship teaching is a requirement for the degree of Master of Arts in Education.

Thesis. All candidates for the degree of Master of Arts in Education must present an acceptable thesis or special report, as a part of the requirement for that degree. The thesis will be adapted to the vocational needs of the candidate and will not be regarded as an index of his capacity for research. In this respect it may differ somewhat from the thesis required of candidates for the degree of Master of Arts in other fields.

Courses in Education

During the academic year 1954-55, the following courses were given: 200a, 201a, 201b, 203a, 207b, 208a, 210a, 214, 215a, 20b, 260b, 263a, 27b, 290b, 309b, 310b, 311, 315a and 350.

FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

200a. *Introduction to Education.* A study of the various factors involved in the development of modern education. The course will consider the problems of the teacher and the administrator in relation to the community. It is designed for both the prospective teacher and the general student interested in education as an institution in American society.

Half course. First semester. Tu. Th., 8:35-9:50.

200b. *Social Foundations of Education.* An analysis of elements in our American society that form the background for our educational principles and practice.

Provision will be made for extra work for undergraduates who desire a third hour of credit.

Half course. Second semester. Tu. Th., 11-12:15. MR. BORGER
Omitted 1954-55.

201a. *Educational Psychology: Child Growth and Development.* A study of the principles basic to the understanding of children with special attention to emotional and social development and learning in the elementary school years.

Provision will be made for extra work for undergraduates who desire a third hour of credit.

Half course. First semester. W., 4-6. MR. COFFEE

201b. *Educational Psychology*: *Adolescent Growth and Development.* A study of psychological principles as they bear upon learning and other problems of education with special reference to the growth and development of youth of secondary school age.

Provision will be made for extra work for undergraduates who desire a third hour of credit.

Half course. Second semester. W., 4-6. MR. JONES

202b. *History of Education.* A study of the relationship between society and its educational agencies. One of the main purposes of the course is to help prospective teachers, and others interested in the schools and their place in society, to assess the strengths and weaknesses of our educational tradition.

Half course. Second semester. MR. BORGER
Omitted 1954-55.

203a. *Curriculum Development in Secondary Education.* A study of the historical background, basic issues, principles and procedures of curriculum organization and development in secondary schools.

Provision will be made for extra work for undergraduates who desire a third hour of credit.

Half course. First semester. MR. BARTLETT

205b. *The Teaching of English.* Methods of teaching composition, poetry, drama, novel and short story.

Half course. Second semester.

Omitted 1954-55.

207b. *Use of Audio-Visual Materials and Community Resources in Teaching.* A survey of principles and practices in the use of visual and auditory materials and community resources in teaching.

Provision will be made for extra meetings for undergraduates desiring a third hour of credit.

Half course. Second semester. Th., 4-6. MR. BORGER

208a. *Methods and Materials in Secondary Education.* A study of methods and techniques used by the teacher in the high school classroom, and a survey of materials available.

Provision will be made for extra work for undergraduates who desire a third hour of credit.

Half course. First semester. Th., 4-6. MR. BARTLETT

208b. *Principles of Secondary Education.* A survey of the major objectives of education, the special functions of the secondary school, and the principles which underlie the learning and teaching process.

Provision will be made for extra work for undergraduates who desire a third hour of credit.

Half course. Second semester.

Omitted 1954-55.

210a. *Educational Psychology, Advanced: Psychological Approach to Citizenship Development.* A study and evaluation of the experimental evidence on the problem of values as they relate to the problems of character and citizenship development among children and adolescents.

Provision will be made for extra work for undergraduates who desire a third hour of credit.

Half course. First semester. W., 4-6. MR. JONES

214. *Tests and Measurements Applied to Psychological and Educational Problems.* A study of the measurement of aptitude, achievement, interest and attitude. Theoretical considerations and practical problems will be included.

Provision will be made for extra work for undergraduates who desire a third hour of credit.

Divisible course.

Through the year. M., 4-6. MR. JONES

215a. *Internship Teaching in the Elementary School.* An extended period of observation and practice in teaching under supervision in regularly organized classes in the middle grades in public schools. Each student is assigned to a critic teacher, under whom he or she works for a minimum of two days per week for the first semester. The first two weeks of this period is normally devoted to observation; the remainder of the time to teaching, under supervision. Lesson planning, pupil evaluation, and playground supervision are required of each student.

Half course. First semester. MR. JONES, MRS. HARRIMAN, MISS KAVANAGH, AND CRITIC TEACHERS

20b. (*Geography* 20b.) *Geography in Education.* A survey of geography in the present-day American schools. The course is designed to meet the needs of those expecting to teach geography.

Provision will be made for extra work for undergraduates who desire a third hour of credit.

Half course. Second semester. W. F., 1-2. MR. WARMAN

25b. *Principles of Physical Education.* The course will provide instruction and laboratory work (1) in the principles and practice of organizing and teaching physical education, and (2) in the administration and teaching of athletic sports including the prevention and care of athletic injuries.

Two hours classroom work, including lecture and discussion, plus four hours laboratory and field work. Permission of instructor required.

Half course. Second semester. Laboratory time to be arranged.

Omitted 1954-55. MR. GRANGER AND ASSOCIATES

27b. *Principles of School and Recreational Leadership.* The aim of this course will be to present the basic concepts and techniques of educational and recreational leadership. Lectures, readings, discussions, and field work. Permission of instructor required for registration.

Provision is made in the form of laboratory work for undergraduates to allow the third hour of credit.

Half course. Second semester. M., 4-6. MISS HUGHES

263a. *Methods and Materials in Teaching of Language Arts in the Elementary School.* This course considers methods and materials in the teaching of the language arts, in the middle grades, with special reference to reading. Particular emphasis will be given to provision for individual differences in teaching, and to the development of independent study skills. Visiting specialists will be brought in for lectures and demonstrations on certain topics.

Provision will be made for extra work for undergraduates who desire a third hour of credit.

Half course. First semester. Th., 4-6. MISS KAVANAGH

260b. *Methods and Materials in Elementary Education.* A study of the most essential materials and methods in elementary school instruction. Special attention will be given to the methods of teaching and learning in the social studies and mathematics, with brief units on the methods of cooperating most effectively with special teachers in the arts. Lectures and demonstrations by visiting specialists will be provided on particular topics, and field trips will be arranged for classroom demonstrations of certain principles and procedures.

Provision will be made for extra work for undergraduates who desire a third hour of credit.

Half course. Second semester. F., 4-6. MR. SHEPHERD

290b. *Philosophy of Education.* An examination of aims, processes and materials of education with special reference to the influence of philosophical ideas on educational problems.

Half course. Second semester. T. Th., 8:35-9:50. MR. BECK

PRIMARILY FOR GRADUATE STUDENTS

309b. *Teaching of the Social Studies.* A study of objectives, methods and materials in the teaching of the social studies in the secondary schools.

Half course. Second semester. M., 4-6. MR. BORGER

310b. *Citizenship Development: Methods and Materials.* A study of procedures and programs in character and citizenship education in the schools. Attention will be given not only to curricular and co-curricular activities in the schools but also to the inter-relations between the school and other institutions and agencies in the community as they relate to the development of values and conduct in youth.

Half course. Second semester. T., 4-6. MR. JONES

311. *Vocational Guidance.* A survey of the techniques and tools of the vocational counselor, including occupational information, vocational testing, methods of interviewing and counseling, case histories and reports, administration and organization of vocational guidance programs.

Through the year. Tu., 4-6. MR. COFFEE

313. *Statistical Methods.* The purpose of this course will be to give an understanding of and practice in the statistical methods most valuable in measurement and research.

Through the year. Tu., 4-6. MR. JONES

Omitted 1954-55.

315a. *Internship Teaching in the Secondary School.* An extensive period of observation and teaching in the field or fields in which the student plans to teach in secondary school. Individual supervision is given by the department and by critic teachers in coöperating schools.

First semester. Time to be arranged.

MR. JONES, MR. BORGER AND CRITIC TEACHERS

350. *Research in Education.* Individual direction of students in their research projects. THE STAFF

360. *Departmental Seminar.*

THE STAFF AND GRADUATE STUDENTS

Department of English

PROFESSOR ILLINGWORTH, ASSOCIATE PROFESSOR ANDERSON,
ASSISTANT PROFESSOR CARTER, ASSISTANT PROFESSOR LETENDRE,
ASSISTANT PROFESSOR BRADLEY

All freshmen who are candidates for the degree of Bachelor of Arts must take both English 11a and b. Freshmen enrolled in the Division of Business Administration are required to take English 11a and Business Administration 14b. Freshmen may also enroll in English 143b.

General Education 17 (Great English and American Writers) is designed especially for non-English majors, and either half is recommended for students who wish to take a course in literature as a means of fulfilling the requirement of a third semester of English beyond English 11. English 13a, 111, and other courses (with the consent of the instructor) are also open to non-English majors; especially recommended is English 13a (Introduction to Poetry).

A major in English consists of a minimum of seven courses in addition to English 11, as follows:

1. English 13a. Normally this course should be taken in the sophomore year. *For English majors,* English 13a is prerequisite to any of the following courses: 101b, 104, 105, 110, 113, 117b, and 122b.
2. English 150b and three other half-courses in English from a group of courses open only to juniors and seniors, namely: 101b, 104, 105, 110, 113, 117b, and 122b.

3. Three additional half-courses in English.
4. Three courses in allied fields: General Education 14; a year course in philosophy (preferably Philosophy 12); and one other course approved by the department of English, preferably from the following list: Fine Arts 11, French 113, German 141, Greek 123a, History 12, Latin 123b, and Music 12.

An English major who has not been credited with two units of Latin or Greek for admission to the college must complete either a course in Latin or Greek or both the following half-courses, given in English: Greek 123a and Latin 123b. If possible, this requirement should be met in the freshman year.

An English major who intends to do graduate work in English should elect at least two additional courses in English and should make certain that his program includes English 18a, 101b, 113, and History 12.

English majors should follow as closely as possible the following program:

First year

English 11
Group A
Group B (General Education 14)
Foreign language
One elective (A course which meets the general bachelor of arts requirement in Fine Arts is recommended.)

Second year

English 13a and three other half-courses in English from group of courses open to sophomores, namely: 16a, 18, 19b, 111, 126a, 127a, 142a, 143a, 146a, 147b, and General Education 18
Group A
Foreign language
One elective. One of the following is recommended: Fine Arts 11, French 113, German 141, Greek 123a, History 12, Latin 123b, and Music 12

Third year

Two half-courses in English from courses open only to juniors and seniors
Two other half-courses in English (recommended)
Foreign language
Group B (a year course in philosophy)
One elective

Fourth year

English 150b and one other half-course in English from courses open only to juniors and seniors
Four other half-courses in English (recommended)
Two electives.

PRIZES IN ENGLISH

The Hoyt Poetry Prize of fifteen dollars is awarded annually by the Department of English for the best poem by an undergraduate. This is the interest on a fund established by the alumni as a memorial to Prentiss Cheney Hoyt, Professor of English at Clark University from 1909 to 1920.

This year the Loring Dodd Drama Contest was inaugurated, a prize of twenty-five dollars being awarded to the student writing the best one-act play. Loring Dodd was Professor of English at Clark University from 1910 to 1949 and the former Chairman of the English Department.

Courses in English

During the academic year 1954-55 the following courses were given: 11, 12, 13a, 101b, 105, 111, 117b, 126a, 143a, 150b; for the Division of Business Administration: B.A. 14b, B.A. 17a; in General Education: G.E. 17, G.E. 18.

Courses in English are classified under the following headings:

I Composition
II A Literature, Surveys and Other General Courses
II B Literature, Special Periods or Individual Authors
III Public Speaking and Dramatics

Course number	Classification	
11	I	Composition
12	III	Public Speaking and Dramatics
13	II A	Literature, Surveys, etc.
16	I	Composition
18	II A	Literature, Surveys, etc.
19	I	Composition
101	II B	Literature, Special Periods, etc.
104	II B	" " " "
105	II B	" " " "
110	II B	" " " "
111	II A	Literature, Surveys, etc.
113	II B	Literature, Special Periods, etc.
117	II B	" " " "
122	II B	" " " "
126	II B	" " " "
127	II B	" " " "
142	II A	Literature, Surveys, etc.
143	II B	Literature, Special Periods, etc.
146	III	Public Speaking and Dramatics
147	III	" " " "
150b	II A	Literature, Surveys, etc.

I. COMPOSITION

11. *Composition and Literature.* The purpose of English 11 is to develop clarity and accuracy in reading and writing and to introduce the student to the various types of literature.

Required of freshmen in the Bachelor of Arts program. The first semester is required of freshmen in the Business Administration program.

Through the year. M.W.F., 8, 9, and 10; Tu. Th., 8 and F., 2; Tu. Th., 9 and F., 1; Tu. Th., 10 and M., 1.

MR. ANDERSON, MR. BRADLEY, MR. CARTER, AND MR. LETENDRE

16a. *Creative Writing.* This course is designed for students who have demonstrated an aptitude for composition and who desire training in creative writing with emphasis on the short story. Individual conferences weekly.

Half course. First semester.

Omitted 1954-55.

19b. *Advanced Composition.* This course is designed for students who desire further training in the basic principles of composition. Special attention is given word choice, sentence and paragraph structure, and organization. Exposition is emphasized. Individual conferences.

Half course. Second semester.

Omitted 1954-55.

II A. LITERATURE: SURVEYS AND OTHER GENERAL COURSES

13a. *Introduction to Poetry.* Required of all English majors.

Half course. First semester. M .W. F., 9. MR. CARTER

General Education 17. Great English and American Writers. See "General Education" immediately preceding the alphabetical list of "Departments and Courses."

18. *The Bible as Literature.* First semester, Old Testament; second semester, New Testament.

Omitted 1954-55.

First semester to be offered in 1955-56. M. W. F., 10.

MR. ILLINGWORTH

111. *A Survey of American Literature.* A course in American literature from Puritan times to the present.

Divisible for non-English majors.

Through the year. Tu. Th., 10-11:15.

MR. ANDERSON, *first semester*
MR. LETENDRE, *second semester*

Offered in alternate years. To be omitted in 1955-56.

142a. *The English Novel.* A study of the novel from its beginning to Thomas Hardy.
Half course. First semester. MR. ILLINGWORTH
Omitted 1954-55.

150b. *Senior Survey.* Required of all English majors in the senior year.
Half course. Second semester. M. W., 2-3:15. MR. ANDERSON

II B. LITERATURE: SPECIAL PERIODS OR INDIVIDUAL AUTHORS

101b. *Chaucer.*
Half course. Second semester. Tu. Th., 9; F., 1. MR. ANDERSON
Offered in alternate years. To be omitted 1955-56.

113. *Shakespeare and the Elizabethan Drama.*
Divisible course.
Through the year. MR. ANDERSON
Offered in alternate years. Omitted 1954-55.

104. *Milton and the Seventeenth Century.*
Divisible course.
Through the year. MR. CARTER
Offered in alternate years. Omitted 1954-55.

105. *Eighteenth Century.*
Divisible course.
Through the year. M. W. F., 10. MR. CARTER
Offered in alternate years. To be omitted 1955-56.

117b. *English Romantic Poetry.*
Half course. Second semester. M. W. F., 9. MR. BRADLEY
Offered in alternate years. To be omitted 1955-56.

110. *Victorian Literature.*
Through the year. Divisible course. MR. BRADLEY
Offered in alternate years. Omitted 1954-55.

122b. *Modern Poetry.* Dickinson, Hopkins, Frost, and Eliot are used as key figures in a general survey of the main trends in modern poetry and poetic criticism.
Half course. Second semester. MR. LETENDRE
Offered in alternate years. Omitted 1954-55.

126a. *Modern British and American Drama.*
Half course. First semester. Tu. Th., 8:30-9:45. MR.LETENDRE
Offered in alternate years. To be omitted 1955-56.

127a. *Modern Continental Drama.*
Half course. First semester. MR. LETENDRE
Offered in alternate years. Omitted 1954-55.

143a. *The Modern Novel.* A comparative study of representative twentieth century novels of Russia, Germany, France, Sweden, England, and the United States to show how different cultures have treated this vehicle of literary expression.

Open to freshmen.
Half course. M. W. F., 10. Mr. Illingworth
Offered in alternate years. To be omitted 1955-56.

III. PUBLIC SPEAKING AND DRAMATICS

12. *Public Speaking.* A course in the composition and delivery of the most commonly used speeches, parliamentary procedure, discussion groups, and vocabulary drill.

Indivisible course.
Through the year. M. W. F., 9. Mr. Illingworth

146a. *Oral Interpretation of Literature.* A course stressing the imagination and the dramatic instinct as fundamental sources of good oral and pantomimic expression. The intellectual elements of vocal expression are studied with special reference to phrasing, inflection, and emphasis; individual and choral speaking.

Permission of the instructor is a condition for enrolling in this course.
Half course. First semester. Mr. Illingworth
Omitted 1954-55.

147b. *The Oral Interpretation of Shakespeare.* The life of Elizabethan England with special emphasis on the theatre of Shakespeare. The plays to be read will include *Hamlet, Cymbeline, Julius Caesar, King Lear, Othello, The Comedy of Errors, Merchant of Venice, Taming of the Shrew, As You Like It, Henry V* and *Richard II.*

Half course. Second semester. Mr. Illingworth
Omitted 1954-55.

Department of Fine Arts

(ART AND MUSIC)

Mr. Cowardin, Mr. Raffman

With the cooperation of Associate Professor Nicol, Assistant Professor Barlow, Assistant Professor Edwards, and Mr. Sante Graziani, Head of the School of the Worcester Art Museum, and his Staff.

The Department offers two programs for a major in Fine Arts. One is intended for those interested primarily in the history of art. The other is designed to provide sound training in fundamentals for qualified students whose principal interest is in the practice of art.

The second of these programs, offered in cooperation with the School of the Worcester Art Museum, has the advantage of affording a thorough professional grounding in art in combination with liberal arts training. Courses to be taken in the museum school are carefully chosen with regard to the individual student's professional objective. Thus courses vary for those interested in the practice of painting or sculpture, the teaching of art, or commercial art. Students who elect this program will have completed, upon graduation, the approximate equivalent of two years of art school training. It should be emphasized that this is a program leading to the degree of Bachelor of Arts and that students electing it must fulfill all general requirements for that degree.

The specific requirements for a major in Fine Arts are as follows:

History of Art

1) The basic course, Fine Arts 11, to be completed before the end of the sophomore year.
2) Fine Arts 111.
3) General Education 14, to be completed before the end of the sophomore year.
4) Two full courses chosen from the following: Fine Arts 15, 16, 191a, 192a.
5) One full course chosen from the following: French 113, German 141, Greek 123a and Latin 123b.
6) Music 12.

Practice of Art

1) Fine Arts 11.
2) General Education 14.
3) Seven courses listed in the catalog of the School of the Worcester Art Museum.

Courses in Fine Arts

During the academic year 1954-55 the following courses in Fine Arts have been given: 11, 111, 12b, 15, 191a.

1. PRIMARILY FOR UNDERGRADUATES

Fine Arts 11. An Introduction to Western Art. A preliminary discussion of terminology and basic aesthetic considerations in the visual arts is followed by a study of architecture, sculpture, and painting from the beginnings to the present day. Field trips are required.

Open to freshmen.

Through the year. M. W. F., 8. Mr. Cowardin

Fine Arts 111. (Representation I.) Introduction to the drawing or depiction of objects in the field of vision; theory and practice in the statement of line, form, light and shade, and perspective. Study of the nature and use of materials and instruments; exercises from objects and from living models; observation of method and accomplishment found in museum collections.

Through the year. Nine class hours weekly. M. W. F., 1:30. At the Worcester Art Museum. MR. GRAZIANI AND MISS MURPHY

Fine Arts 12b. A Survey of Painting in the West. The development of pictorial expression from the beginning to the present. Emphasis is placed upon methods and styles. Field trips are required. Designed primarily for non-majors. May not be counted in addition to Fine Arts 11.

Open to freshmen.

Half course. Second semester. Tu. Th., 10; M., 2. MR. COWARDIN

Fine Arts 15. Art of the Renaissance in Italy. A detailed consideration of the architecture, sculpture, and painting of the Italian Renaissance. The first semester is devoted to the fifteenth century and the second semester to the sixteenth. Emphasis is placed on the historical background. Field trips are required. Fine Arts 11 is ordinarily prerequisite.

Through the year. M. W. F., 10. MR. COWARDIN

Offered in alternate years. To be omitted in 1955-56.

Fine Arts 16. The Art of the Seventeenth and Eighteenth Centuries. A consideration of the origins of the baroque style, followed by a study of major works of European art of the seventeenth and eighteenth centuries. The principal stylistic trends are stressed. The more important artistic personalities—Bernini, Rubens, Rembrandt, Velasquez, and others, are also treated in detail. Field trips are required. Fine Arts 11 is ordinarily prerequisite.

Through the year. M. W. F., 10. MR. COWARDIN

Offered in alternate years. Omitted 1954-55.

Fine Arts 191a. The Art of the Ancient Near East and India. This course is primarily concerned with architecture and sculpture in ancient Mesopotamia, Assyria, Persia, and India. Significant works are examined critically and studied in relation to their historical and religious background. Field trips are required.

Half course. First semester. MR. COWARDIN

Offered in alternate years. To be omitted in 1955-56.

Fine Arts 192a. The Art of China and Japan. An introduction to the art of the Far East. Sculpture and painting in China from the prehistoric period to the Ming dynasty, and, in Japan, from the Suiko to the Tokugawa period. Architecture will be treated only incidentally. Field trips are required.

Half course. First semester. Tu. Th., 10; M., 2. MR. COWARDIN
Offered in alternate years. Omitted 1954-55.

Fine Arts 199. Advanced work at the School of the Worcester Art Museum for majors in the practice of art.
STAFF OF THE MUSEUM SCHOOL

Courses in Music

Music 12. Introduction to Music. With "learning to listen" as its motif and designed for the student without previous training this course deals with the basic theoretical elements and materials of music.

Characteristic works of the great composers of the Baroque, Classical, and Romantic periods will be examined with respect to historical precedent, technical devices, and style.

Students entering the 2nd semester must have had the 1st half year, or its equivalent.

Through the year. Tu. Th., 9; F., 1. MR. RAFFMAN

In 1955-56 this material will be offered in three half courses: *Music 12a, Introduction to Music; Music 12b, Baroque and Classical Music; Music 13b, Romantic Music.*

Music 13a. Twentieth Century Music. An examination of the works of Debussy, Ravel, Stravinsky, Hindemith, Schoenberg, Bartok, and other significant composers whose works have been the driving force behind the great tonal advances of the past fifty years. The influence of Jazz on both American and European music will be discussed, as well as Jazz in its pure state.

Prerequisite: Music 12 or its equivalent.

Half course. First semester. M. W. F., 9. MR. RAFFMAN

Music 14b. Practical Music. Designed primarily for the student with previous musical experience and with structural analysis of music as its motif, this course deals extensively with music theory and ear training. There is dictation both from the piano and records as well as intensive score reading.

Prerequisite: permission of instructor.

Half course. Second semester. MR. RAFFMAN

French

A description of the offerings in French and a list of courses in French will be found in the announcement of the Department of Romance Languages.

General Education

A statement concerning General Education and a description of the courses offered under this heading will be found immediately before the announcement of the Department of Biology in this section of the university catalog.

Geography

PROFESSOR VAN VALKENBURG, PROFESSOR MURPHY, PROFESSOR LOUGEE, ASSOCIATE PROFESSOR WARMAN, ASSOCIATE PROFESSOR HIGBEE,* INSTRUCTOR BURNHAM, VISITING LECTURER RAISZ

A complete statement of the organization and special requirements in the Graduate School of Geography will be found in an earlier section of this catalog under the heading The Graduate School of Geography.

UNDERGRADUATE PROGRAMS

Undergraduates planning to major in geography or to enter graduate work in geography are urged to consult the geography staff early in their undergraduate courses, to plan suitable programs including essential courses in related fields.

Majors in geography are required to take seven year-courses, or the equivalent, in geography and related fields. At least four, and not more than five of these courses must be in geography.

Geography 10, Principles of Geography, is usually taken in the freshman year (or as early as possible after the major subject is chosen to be geography). One or two of the following courses may be taken during the sophomore year: Geography 12a, Introduction to Climatology; Geography 16, Economic Geography; Geography 191, Cartography. Courses in geography, such as 28a, Geography of New England, or 25, Conservation of Natural Resources, or regional courses should not be undertaken until the junior or senior years. Juniors of superior standing and seniors may be accepted, by special permission, to take number "2" geography courses, such as 27a, Human Geography; 27b, Cultural Geography; 201, Political Geography; 20b, Geography in

* Brunschweiler – see p 199.

Education (primarily for those expecting to teach); 282a, Geography of North America; 283b, Geography of South America; 285a, Geography of Europe. A non-credit seminar is conducted for all seniors who are majoring in geography.

COURSES IN FIELDS RELATED TO GEOGRAPHY

Students majoring in geography should plan early to take the required courses in other fields in order to possess the prerequisites for admission to advanced related courses in their junior and senior years to parallel the courses in their geography program.

Subjects in Group A, which are strongly recommended by the staff of the Department of Geography, are geology and biology. However, where special interest is expressed in physics, chemistry, psychology, or mathematics the student's program can be planned to include these subjects.

Related fields may be found listed under Group B. General Education 14 is recommended for the freshman year. Courses recommended for the sophomore year are: Sociology 11, Economics 11, Government 15, History 12. More advanced work in the fields of sociology, international relations, psychology and philosophy will depend largely upon the individual student's interests and desires.

"HONORS WORK" AND COMPREHENSIVE EXAMINATIONS

The Clark University Graduate School of Geography offers opportunity to properly qualified students for advanced training in geography. The staff, composed of specialists in their various fields of geography offer regular courses in instruction and direct advanced students in research work. Hence, a junior or senior pursuing an "honors program" in geography is afforded an opportunity to associate with other students in the Graduate School of Geography. For example, a superior student, after petitioning and receiving approval of the College Board and the Secretary of the Graduate Board, may undertake Geography 391, Advanced Cartography; 314, Physiography of the Western Hemisphere; 33a, Soils; and 34, Land Use; 32, Climatology; 36, Problems of Economic Geography; and some graduate regional courses. On rare occasions an undergraduate student has been invited to participate in the Fall Field Camp of the Graduate School.

Independent research projects may be undertaken with the adviser in constant surveillance. This research work may be in the fields of human geography, physiography, geography in education, economic geography, land utilization, cartography and regional geography. Such research work must be completed within the semester in which it is started, or proof advanced that the study warrants more time. The staff also conducts an oral examination of at least one hour's length to ascertain the achievement of an "honors student."

A seminar, required of all seniors who are majoring in geography, is established to explore problems relative to the comprehensive examinations.

Courses in Geography

The following courses were given in 1954-55.

10, 12a, 37a & b, 20b, 283b	MR. WARMAN
16, 33a, 25b, 34	MR. HIGBEE
201, 32, 385a & b, 300	MR. VAN VALKENBURG
298a & b, Geology 12	MR. BRUNNSCHWEILER
36b, 361b	MR. MURPHY
28a, 282b, 315	MR. LOUGEE
191, 291	MR. BURNHAM
391a & b	MR. RAISZ
30 Seminar	STAFF
399a Field Studies	STAFF

1. PRIMARILY FOR UNDERGRADUATES

10. *Principles of Geography.* An introductory course dealing primarily with the physical phases of geography and the application of the principles of geography to the study of selected regions throughout the world. Juniors and seniors admitted only by special permission.

Open to freshmen.

Through the year. M. W. F., 10. MR. WARMAN

12a. *Introduction to Climatology.* Elements of meteorology and climatology with practical exercises. Emphasis on most recent theories; explanation of distribution of types of climate and weather.

Prerequisite: Geography 10 or equivalent.

Half course. First semester. M. W. F., 8. MR. WARMAN

16. *Economic Geography.* The geography of the world's mineral, plant and soil resources with special reference to problems of use and conservation.

Prerequisite: Geography 10 or Economics 11, or equivalent

Through the year. M. W. F., 9. MR. HIGBEE

191. *Cartography and Graphics.* Preparation of maps, graphs, charts, and block drawings. Since space is limited the instructor should be conferred with upon registration.

Through the year. M., 3-5; Tu., 2. MR. BURNHAM

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

20b. *Geography in Education.* A survey of geography in the present-day American school system, designed to meet the needs of those expecting to teach geography.

This class usually meets in the late afternoon for the convenience of public and private school teachers.

Half course. Second semester. W., 4-6. Mr. Warman

25b. *Conservation of Natural Resources.* A survey of natural resources including a study of ways and means of insuring wise utilization of essential or strategic resources.

Second semester. M. W., 11; a third hour to be arranged.

Omitted in 1955-56; to be offered in 1956-57. Mr. Higbee

28a. *Geography of New England.* A field and lecture course with special emphasis on Worcester first, then New England. Class meetings begin about the middle of October, following the field camp. Because of the late beginning, three special week-end programs of three hours each of laboratory work in the field, with carefully prepared reports of each are required.

Prerequisites: Geography 10 and Geology 12, or equivalent.

Half course. First semester. M. W. F., 9. Mr. Lougee

29. *Presentation Techniques of Geographic Material.* A methods course for graduate students who plan to teach on secondary, college, and university level. Non-credit course.

Hours to be arranged. Mr. Van Valkenburg and Mr. Warman

201. *Political Geography.* A study of major political problems of the world as related to geographic factors. Application of principles to international relations of selected regions.

Through the year. M., 1; Tu. Th., 10. Mr. Van Valkenburg

282b. *Geography of Anglo-America.* A systematic regional treatment of the physical, economic and cultural geography of the United States, Canada and Alaska.

Half course. Second semester. M. W. F., 9. Mr. Lougee

283a. *Geography of Middle America.* Geographic background of the republics and islands of the Caribbean; analysis of selected important regions; increasing importance of the Caribbean area in commercial and political relations; detailed study of large scale maps.

Half course. First semester. M. W., 1 (one hour map lab.).

Mr. Warman

283b. *Geography of South America.* Analysis of the major geographic regions; special geographic problems of Latin American governments; detailed study of topographic maps.

Half course. Second semester. M. W. F., 8. Mr. Warman

291. *Cartography and Graphics.*
Through the year. Hours to be arranged. Mr. Burnham

298. *Map and Aerial Photograph Interpretation.*
Through the year. Th., 3-5.
To be omitted in 1955-56.

3. PRIMARILY FOR GRADUATE STUDENTS

30. *Seminar.* Required of all graduate students.
Alternate Tuesdays 3. The Staff

32. *Regional Climatology.* A study of the climates of the world by major regional examples.
Two hours, through the year. Tu. Th., 8. Mr. Van Valkenburg

33a. *Soils Geography.* A review of the development and character of soils, their distribution and economic significance, in the light of their geographical relationships.
Two hours. First semester. W., 2-4. Mr. Higbee

34. *Land Utilization and Planning.* An outline of relationships that physical and cultural factors bear to purpose and pattern of land uses, conservation of land resources, and basic elements of land planning.
Two hours, through the year. W., 2-4. Mr. Higbee
To be omitted in 1955-56; to be offered in 1956-57.

36. *Problems in Economic Geography.* An advanced study, emphasizing the various research fields of economic geography. Research methods and techniques in mining, agriculture, manufacturing and transportation are considered in detail.
Two hours, through the year. M. W., 10. Mr. Murphy

37a. *Human Geography.* A study of the influence and effect of location, area, relief, coastline, drainage systems, climate, and other geographic factors, separately and in their mutual interaction upon the economic, social and political development of peoples and states.
Half course. First semester. T. Th., 2. Mr. Warman
(37a and 37b should be taken in the same year.)

37b. *Cultural Geography.* A summary of the role that geographic factors have played in the evolution of races and cultures, artifacts and institutions.
Half course. Second semester. Tu. Th., 2. Mr. Warman

39. *Historical Background of Geography.* A series of lectures on European and American phases.
Hours to be arranged. The Staff
To be omitted in 1955-56.

300. *Ph.D. Seminar.* Alternate Tuesdays 3.
Mr. Van Valkenburg

311b. *Oceanography.* The study of the Oceans from the standpoint of the great basins, their inherent characteristics and their economic worth. Non-credit course.

Hours to be arranged.

To be omitted in 1955-56.

314. *Regional Physiography of Western Hemisphere.* A study of selected areas within the major physiographic regions. Laboratory interpretation of maps, aerial photographs, block diagrams.

Two hours of lecture and two hours of laboratory weekly.

Through the year. Tu. Th., 9 (Th., 3-5 Lab.). Mr. Lougee

To be offered in 1955-56. To be omitted in 1956-57.

315. *Regional Physiography of the Eastern Hemisphere.* A study of selected areas within the major physiographic regions. Laboratory interpretation of maps, aerial photographs, block diagrams.

Two hours of lectures and two hours of laboratory weekly.

Through the year. Tu. Th., 9 (Th., 3-5 Lab.). Mr. Lougee

To be offered in alternate years. To be omitted in 1955-56.

333b. *Biogeography.* Geographical significance of character, function, distribution, and relationships of plant and animal forms and societies in their adjustments to environment.

Two hours. Second semester. W., 2-4.

To be offered in 1955-56. To be omitted in 1956-57.

352. *Geography of American Agriculture.* An appraisal of the changing and changed pattern of agriculture in the United States including map revisions and most recent graphic materials available.

Through the year. M. W., 11. Mr. Higbee

To be offered 1955-56. To be omitted in 1956-57.

361. *Urban Geography.* The modern city from the viewpoint of geography. Particular emphasis is placed on the American city.

Two hours. Through the year. Tu. Th., 11. Mr. Murphy

385a. *Geography of Europe.* Intensive survey of the continent and detailed study of selected regions.

Half course. First semester. Tu. Th., 1. Mr. Van Valkenburg

385b. *Geography of Asia.* An intensive study of the continent, region by region.

Half course. Second semester. Tu. Th., 1. Mr. Van Valkenburg

387b. *Geography of the Pacific Area.* A regional treatment of the human geography of the islands of the Pacific.

Offered when demand warrants. Mr. Murphy

To be omitted in 1955-56.

391b. *Cartographic Presentation of the Geographical Landscape.*

Half course. Second semester. Mr. Raisz

399a. *Field Methods and Studies.* Required of every graduate student.

First three weeks of every year. THE STAFF

RESEARCH COURSES

(Under direction of proper staff members)

200. *Geography in Education*
310. *Regional Physiography*
320. *Climatology*
330. *Soils and Biogeography*
340. *Land Utilization*
350. *Agricultural Geography*
360. *Economic Geography*
360b. *Urban Geography*
370. *Human Geography and Demography*
380. *Regional Geography*
390. *Political Geography*

Department of Geology

ASSISTANT PROFESSOR BRUNNSCHWEILER

PRIMARILY FOR UNDERGRADUATES

12. *General Geology.* A course describing the structure and rock formations of the earth. In the first semester the emphasis will be placed upon the effect of physical forces on the earth's surface (Geomorphology), in the second the evolution of landscapes through geologic time will be dealt with (Historical Geology).

Three lectures and one laboratory period weekly. Three field excursions each semester.

Indivisible course.

Through the year. M. W. F., 8; Th., 2. MR. BRUNNSCHWEILER

121a. *Introductory Mineralogy.* A course dealing with the identification of minerals by their geometrical, physical, and chemical properties. Principles of Crystallography and techniques of Blowpipe Analysis are also taught.

Half course. First semester. Two afternoon meetings weekly.

Omitted 1954-55.

122b. *Economic Geology.* A study of the major useful mineral deposits, their origin, their structural relations and geographic distribution. Includes principles of Petroleum and Coal Geology.

Half course. Second semester. Two afternoon meetings weekly.

Omitted 1954-55.

Department of German

Professor Arndt, Assistant Professor Edwards

REASONS FOR THE STUDY OF GERMAN

Nescire quid antea quam natus sis acciderit, id semper est esse puerum.
Cicero (106-43 B.C.)

Not to know what came to pass before you were born, is always to remain a child.

Wer nicht von dreytausend Jahren
Sich weiss Rechenschaft zu geben,
Bleib im Dunkeln unerfahren,
Mag von Tag zu Tage leben.
Goethe (1749-1832)

Whoever cannot account to himself for 3000 years of time, let him live from day to day, an inexperienced man groping in the dark.

Many centuries of a carefully fostered tradition of study, meditation, and research for the advancement of human learning have made the German language a great storehouse of information for almost all branches of human knowledge, and the soul of one of the greatest of Western cultures. For the intellectually curious American of our time, whether he plans a career as scientist, philosopher, theologian, professional soldier, technician, educator or public servant, the study of German will provide an almost indispensable insight into the intellectual, psychic, religious, political and economic life, especially of East and West Germany, Austria, and Switzerland, the crucial areas of past, present and future international conflicts, and the home of thousands of American soldiers for almost a decade. As a command of the German language was considered one of the marks of an educated man in the time of the first flowering of New England, so it remains a most important study in our internationally far more complicated contemporary world.

DEPARTMENTAL OBJECTIVES

Out of an awareness of the important position of German areas for our country in peace or war, the Department of German offers a program of courses having the fourfold objective: 1, facility in the use of the German language (11, 12, 13, 132); 2, a comprehension of the outstanding cultural epochs in German history (141); 3, an integrated knowledge of the major German writers and thinkers (152, 153, 162); 4, an understanding of American and German relations in the past and present (200). Concentration in German as the mother tongue of the

Central European geographical areas, provides an indispensable background for an intelligent understanding of American interests in Europe, for work in international relations, and in most scientific fields.

COMPREHENSIVE EXAMINATIONS AND MAJORS

For the time being the department will not require comprehensive examinations, but each major in the Department will be required to complete certain extra-curricular reading assignments given in a departmental reading list designed to aid the student in reaching the fourfold objective outlined above. All students wishing to major in German should see the head of the department before they register.

EXTRA-CURRICULAR ACTIVITIES

The department sponsors the following organizations:

THE GERMANIC SOCIETY, an organization of students which provides an informal meeting ground for all those interested in the German language and culture. Its programs are regularly announced on the bulletin board and in the student newspaper.

DELTA PHI ALPHA, a chapter of the national honorary German fraternity. Outstanding students of German who have demonstrated their interest in the German language and culture may be invited to become members of the fraternity upon the nomination of the department.

Courses in German

During the academic year 1954-55 the following courses were given: 11, 12, 13, 141.

11. *Introductory German.* The regular first year course in German meeting three hours a week through the academic year. Study of pronunciation, vocabulary, elements of grammar, composition, and reading of suitable modern German prose.

Indivisible course.

Through the year. MR. ARNDT, MR. EDWARDS

12. *Intermediate German.* The regular second year course in German meeting three hours a week through the academic year. Review of first year grammar, translation from and into German, exercises in written and oral composition, reading of modern German prose.

Prerequisite: German 11 or two years of high school German.

Indivisible course.

Through the year. MR. ARNDT, MR. EDWARDS

13. *Advanced German Reading.* The regular third year course in German meeting three hours a week through the academic year. This course completes the undergraduate language requirement in German. In the first semester: reading of advanced German prose. In the second semester students will be introduced to the reading of contemporary scientific and literary German journals and newspapers.

Prerequisite: German 12.
Through the year. MR. ARNDT, MR. EDWARDS

132. *Oral and Written German.* Practice in writing German letters, study of modern prose as a basis for practice in the oral use of the language. May be offered to complete language requirement in German.

Prerequisite: German 12.
Through the year.

141. *Germanic Civilization.* An illustrated lecture course in English on the literature, history, and the fine arts of the German lands from the Holy Roman Empire to the present day, with special stress laid upon the Reformation, the Age of Enlightenment and the Classical Period.

Through the year. MR. EDWARDS

152. *German Literature I.* A survey of German literary movements from the earliest times to the end of the Classical Period.

Through the year. MR. ARNDT
Alternates with course 153.

153. *German Literature II.* A survey of German literary movements from the beginning of the Romantic Period to the present.

Through the year. MR. ARNDT
Alternates with course 152.

162a. *Faust.* Goethe's *Faust* (both parts) as the highest poetic development of the Faust legend.

Half course. First semester. MR. ARNDT

200b. *German Seminar.* For German majors in their senior year. The work of the seminar will vary from year to year according to the needs of the students.

Half course. Second semester. MR. ARNDT

Department of History, Government and International Relations

Professor Lee, Professor Jordan, Associate Professor Hayden, Associate Professor Campbell, Associate Professor Cohen, Assistant Professor Raeff

UNDERGRADUATE WORK

In its undergraduate program the department gives basic courses in the fields of American, European, and British history, American and European government, and international relations. It offers departmental majors in history or government, and participates in the interdepartmental major programs: International Relations and American Civilization.

General Education 14 must be taken as early as possible by all majors in the department. Other courses primarily for undergraduates may be elected by non-majors who have not previously taken G.E. 14; and courses for advanced and graduate students may be taken by non-majors with the permission of the instructor if in his judgment the student has an adequate background for the course. Majors will normally take Economics 11 as well as G.E. 14 before the end of the sophomore year. Majors in government will normally take Government 15 before the end of the sophomore year. Further elections in this and related departments are determined by the major's special interests, but are expected to include at least two upper class (2) courses in this department. In addition History 20 is required of all senior majors as partial preparation for the comprehensive examinations given by the department in accordance with the program voted by the faculty.

GRADUATE WORK

The distinctive feature of the graduate work is the emphasis laid upon individual instruction and guidance by means of informal conferences between instructor and student, small classes, and seminars. The principal fields of graduate study are American, English and European history and politics, modern diplomacy, and the international relations of the United States, Europe, the British Empire and the Far East.

The program for the degree of Master of Arts is worked out individually with each student who may choose to concentrate upon history, or government, or international relations. All are required to take the departmental seminar (History 30). For general requirements, see the announcement of the Graduate School.

For the degree of Doctor of Philosophy, which may be taken in history or international relations, each student must choose six fields of study to be agreed upon as early as possible in the first year of residence beyond the M.A., and after a conference between the student and the departmental staff. By the end of the same year the student is expected to complete satisfactorily two of his fields, either by course work or by passing a three-hour written examination in each field; and to complete, normally by enrollment in a seminar or similar course, a task of research and writing. In the second year beyond the M.A., or later, the student must complete the remaining four fields, one or two by course or written examination, and the others by an oral examination given by the staff and at least one member of the Graduate Board from another department. This final step constitutes the "preliminary examination" required by the Graduate Board. For language and other requirements, see the announcement of the Graduate School concerning the doctorate.

The doctoral dissertation, written in one of the six fields which is designated as the special field, must be submitted in complete preliminary draft to the supervising instructor not later than March 1 of the year in which the candidate hopes to receive the degree. The final examination for the doctorate tests the candidate's expert knowledge of his special field as well as the relation of his dissertation to it.

International Relations. The procedures toward advanced degrees in this subject are outlined above. Candidates are expected, however, to take work in economics and geography as part of an integrated program to be arranged by the department in consultation with the other departments concerned.

Courses in History

During the academic year 1954-55 the following courses were given: General Education 14, History 20, 210b, 22b, 221, 23, 230, 232, 283, 30, 314a, 321a, 331.

1. PRIMARILY FOR UNDERGRADUATES

General Education 14. Europe and the United States since 1500. For a complete description of this course, see *General Education.*

Required of all majors in the department.

Through the year. Tu. Th., 9; F., 1.

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

20. *Senior Conference.* Required of all seniors as part of their preparation for the comprehensive examinations. A list of required readings forms the basis for discussion which is intended to correlate and review the fields of history and government.

Half course, through the year. M., 2. THE STAFF

205a. *Introduction to Political Philosophy.* A study of the main trends of Western political thought with reference to their underlying social, political and economic realities.

Half course. First semester. MR. JORDAN

Offered in alternate years. Omitted 1954-55.

205b. *Recent Political Thought.* The conflicting ideologies of our time in their development since the French Revolution. Marxism, Fascism, and Nazism will be analyzed with especial reference to their challenge to liberal democracy.

Half course. Second semester. MR. JORDAN

Omitted 1954-55.

21. *Foundations of Modern Europe.* Following an introductory survey of medieval history, the course will emphasize the Renaissance and Reformation to the second half of the 16th century.

Through the year. MR. LEE AND MR. RAEFF

Offered in alternate years. Omitted 1954-55.

210b. *Europe in the Revolutionary Era (To 1830).* This replaces 210a (Europe, 1648-1830), and concentrates upon the background, course, and consequences of the French Revolution in its European setting.

Half course. Second semester. Tu. Th., 3:25-4:40. MR. LEE

Offered in alternate years. To be omitted in 1955-56.

211. *Europe since 1830.* The development of the major European nations with special emphasis on the period from 1870 to the present.

Through the year. MR. LEE

Offered in alternate years. Omitted 1954-55.

22b. *Tudor and Stuart England.* A survey of the period from 1485 to 1688 with particular attention to the social backgrounds of

English literature and to the conditions leading to colonization of America.
Half course. Second semester. Tu. Th., 10; M., 1. Mr. Jordan
To be omitted in 1955-56.

221. *England since 1760.* A general course, stressing the political, economic and social development of the modern commonwealth.
Through the year. Tu. Th., 8:35-9:50. Mr. Jordan
To be omitted in 1955-56.

225. *History of the British Empire.* In the second semester the course will deal with developments and problems since 1900.
Through the year. Mr. Jordan
Offered in alternate years. Omitted 1954-55.

23. *Senior Conference in American Civilization.* Required of all seniors as part of their preparation for the comprehensive examinations in American Civilization. Readings, papers and discussions will help the students review and integrate their course work in this field.
Half course, through the year. Th., 3. Mr. Campbell

230. *Social and Intellectual History of the United States.* Beginning with a brief survey of the European background of American ideas and institutions, this course deals with the main currents in American thought and society from colonial times to the present.
Through the year. M. W. F., 11. Mr. Campbell

232. *United States Constitutional History and Law.* A survey of the major developments in our constitutional system and law with emphasis in the second semester upon contemporary problems.
Prerequisite: History 131 or Government 15.
Through the year. M. W. F., 8. Mr. Campbell and Mr. Cohen
Offered in alternate years. To be omitted in 1955-56.

234a. *American Diplomatic History.* The history of the foreign relations of the United States from 1783 to about 1941.
Half course. First semester. Mr. Hayden
Offered in alternate years. Omitted 1954-55.

235a. *The United States in the Twentieth Century.* A study of the chief influences in American civilization since 1900, with special attention to the emergence of current social and economic problems.
Half course. First semester. Mr. Campbell
Offered in alternate years. Omitted 1954-55.

274b. *The Modern Far East.* The course deals primarily with international relations in the region since 1895.
Half course. Second semester. Mr. Hayden
Offered in alternate years. Omitted 1954-55.

281. *History of Russia.* From the origins of the Russian state to the present. Special attention is given to the development of Russian society and the ideological preparation of the Revolution. The period since Peter the Great is treated in the second semester.

Through the year. MR. RAEFF

Offered in alternate years. Omitted 1954-55.

282a. *History of the Soviet System.* Major emphasis is laid on the process of consolidation and transformation of the Soviet system after its establishment in 1917. The last part of the course deals with developments since 1941, with special reference to the sovietization of Eastern Europe and China.

Half course. First semester. MR. RAEFF

Omitted 1954-55.

283. *Historical Development of Eastern Central Europe.* Traces the development and character of the social, political, and cultural factors which have entered into the making of the area lying between Germany and Russia.

Through the year. M. W. F., 10. MR. RAEFF

Offered in alternate years. To be omitted in 1955-56.

3. PRIMARILY FOR GRADUATE STUDENTS

30. *Department Seminar.* Introduction to bibliography and methods of research, and discussion of research problems being investigated by graduate students and faculty.

Required of all first-year graduate students in the department.

Half course. First semester. W., 4-6. MR. LEE AND THE STAFF

311b. *European Intellectual History.* A study of currents of thought in the 19th century.

Half course. Second semester. MR. JORDAN AND MR. RAEFF

Omitted 1954-55.

314a. *European International Relations, 1870-1918.* A study of the diplomatic history of Europe from the Franco-Prussian War to the First World War.

Half course. First semester. Th., 3-5. MR. LEE

321a. *England in the Twentieth Century.* The development of the United Kingdom from the time of its greatest power to its present struggle to maintain a world position.

Half course. First semester. M., 3. MR. JORDAN

To be omitted in 1955-56.

331. *Problems in the History of the United States since 1900.* Individual research topics, supplemented by readings and discussion in the field of twentieth century United States history.

Through the year. Tu., 3-5. MR. CAMPBELL

GRADUATE READING AND THESIS COURSES

31. *Reading*
310. *Thesis* } *In the History and International Relations of Europe.* Mr. Lee

32. *Reading*
320. *Thesis* } *In the History and International Relations of England and the British Empire.* Mr. Jordan

33. *Reading*
330. *Thesis* } *In the History of the United States.* Mr. Campbell

38. *Reading*
380. *Thesis* } *In Early Modern and Slavic History.* Mr. Raeff

Courses in Government

During the academic year 1954-55, the following courses were given: Government 15, 24, 240, 241, 251a, 351 and History 232b.

1. PRIMARILY FOR UNDERGRADUATES

15. *Introduction to American Government.* A short survey of the theories of the origin and purpose of the state is followed by a study of the functioning of the government of the United States with emphasis on contemporary problems of the federal government.
Through the year. M. W. F., 9. Mr. Cohen

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

24. *International Relations.* A survey of the course of world politics since 1914, with emphasis on the shifting patterns of power and the rise of new nations and revolutionary doctrines. Special attention is given in the second semester to the Second World War and its consequences.
Through the year. Tu. Th., 9; F., 1. Mr. Hayden

240. *Seminar in International Relations.* Group study of certain problems in contemporary affairs. Required of seniors in the international relations major; open as an elective only with the instructor's permission.
Through the year. Tu., 3:20, and conferences. Mr. Hayden

241. *International Law and Organization.* First semester: the historic principles of international law and their application in the modern world. Second semester: an examination of the institutions created to deal with problems of commerce, social welfare, and collective security on an international basis.
Through the year. M. W. F., 9. Mr. Hayden
Offered in alternate years. To be omitted in 1955-56.

25a. *Comparative Government.* The governments and politics of Great Britain and the major European powers.
Half course. First semester. Mr. Cohen
Offered in alternate years. Omitted 1954-55.

251a. *American Political Parties.* A study of the functioning of American party organizations, pressure groups, and the electorate in American politics. Emphasis is placed upon current problems and trends in the field.
Half course. First semester. M. W. F., 10. Mr. Cohen
Offered in alternate years. To be omitted in 1955-56.

History 232. United States Constitutional History and Law. See courses in History. Mr. Campbell and Mr. Cohen

252b. *Introduction to Public Administration.* An introductory examination of the role of administration in modern government, including problems of personnel administration, fiscal management, administrative regulation and government organization.
Half course. Second semester. Mr. Cohen
Offered in alternate years. Omitted 1954-55.

3. PRIMARILY FOR GRADUATE STUDENTS

341. *International Relations Seminar.* A study of contemporary problems by means of student research and reports.
Through the year. Hours to be arranged. Mr. Hayden
Omitted 1954-55.

351. *Problems in American Government.* A study primarily by means of student research and discussion of selected contemporary problems in American government, including the legislative process, public opinion, and political parties.
Through the year. Hours to be arranged. Mr. Cohen

GRADUATE READING AND THESIS COURSES

34. *Reading* }
340. *Thesis* } *In International Relations.* Mr. Hayden

35. *Reading* }
350. *Thesis* } *In American and Comparative Government and Politics.* Mr. Cohen

Interdepartmental Majors

To provide undergraduate "majors" in certain fields which are intrinsically worthwhile culturally or professionally but which cross departmental boundaries, the Faculty has authorized a group of "interdepartmental majors."

At present two programs are offered under this plan:

I. International Relations

II. American Civilization

A description of these majors will be found at the beginning of the section "Departments and Courses" in this catalog, immediately after the introductory statements.

International Relations

See the announcement of the Department of History, Government and International Relations.

An "interdepartmental major" in the field of International Relations is offered to candidates for the degree of Bachelor of Arts. The program required for the completion of this major is fully outlined under the earlier heading *Interdepartmental Majors.*

Department of Mathematics

PROFESSOR BUMER, ASSOCIATE PROFESSOR STUBBE,
ASSISTANT PROFESSOR GORENSTEIN

The department of mathematics offers courses leading to an undergraduate major in mathematics, courses necessary for the study of the physical sciences and courses for the student who wishes to learn about the fundamental concepts of mathematics primarily for their cultural value. Some of the courses offered are for advanced undergraduates and graduate students.

Courses 11, 12, 13 and 214 form the basis of a major in mathematics and are important for the study of the physical sciences. A major in mathematics normally includes one course in mathematics in addition to the four courses above and two courses in an allied field of study such as physics, chemistry or philosophy.

Courses in Mathematics

During the academic year 1954-55 the following courses were given: Mathematics 11, 12, 13, 214, 219 and Business Administration 13.

1. PRIMARILY FOR UNDERGRADUATES

11. *Freshman Mathematics.* Course 11 has for prerequisites one course in algebra and one course in plane geometry taken in the secondary schools, although at least three courses in secondary school mathematics are advisable. Careful attention is given to fundamental concepts and to the development of useful techniques. Topics in algebra, trigonometry and analytic geometry are introduced.

A qualified student may request permission to take an attainment test in the subject matter of course 11. If he passes such a test he may enter course 12.

Through the year. M. W. F., 9 and 10; Tu. Th., 9; F., 1.
MR. BUMER, MR. STUBBE, MR. GORENSTEIN

12. *Calculus.* Course 12 introduces both the differential and integral calculus and is essential to further work in mathematics as well as to work in the natural sciences.

Prerequisite: Course 11 or its equivalent.
Through the year. M. W. F., 9; Tu. Th., 10; M., 1.
MR. GORENSTEIN, MR. STUBBE

13. *Intermediate Calculus and Differential Equations.* This course includes a discussion of geometric and physical applications of integration, sequences and series, partial differentiation and double integrations; also, ordinary differential equations, with emphasis on the principal types of first and second order equations. Applications to geometry, physics, chemistry, and mechanics are stressed.

Prerequisite: Course 12.

Through the year. M. W. F., 9. MR. STUBBE

17. *Mathematical Statistics.* Topics discussed include frequency distributions, moments, tests of significance, correlation theory of large and small sampling. Although numerous applied problems are worked out in detail by the students, emphasis is placed on the mathematical theory.

Prerequisite: Course 12.

Through the year. Tu. Th., 11-12:15. MR. BUMER

Offered in alternate years. Omitted 1954-55.

General Education 110. Fundamental Concepts of Elementary Mathematics.

For description of this course, see courses listed under General Education.

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

214. *Advanced Calculus.* The following topics are among those studied: complex numbers, partial differentiation, infinite series, vector analysis, multiple and line integrals. Some emphasis is placed on the uses to which the topics can be put in the sciences and engineering.

Prerequisite: Course 12.

Through the year. Tu. Thu., 11-12:15. MR. BUMER

215. *Modern Algebra.* The course affords an introduction to modern algebraic systems: groups, integral domains, rings, fields, abstract vector spaces, matrices and related topics. The emphasis is on developing in the student the modern axiomatic point of view, with considerable attention given to the nature and construction of formal proof.

Prerequisite: Course 12.

Through the year. Tu. Th., 11-12:15. MR. GORENSTEIN

Offered in alternate years. Omitted 1954-55.

216a. *Introduction to Complex Variables.* The course affords an introduction to analytic functions, line integrals, conformal mapping. Considerable attention is given to rigor and many examples are studied to illustrate applications.

Prerequisite or taken concurrently: Course 214.

Half course. First semester. W. F., 11-12:15. MR. BUMER

Offered in alternate years. Omitted 1954-55.

216b. *Advanced Differential Equations.* Some partial differential equations of mathematical physics, Fourier Series and boundary value problems, systems of ordinary differential equations are studied.
Prerequisite: Course 13.
Half course. Second semester. W. F., 11-12:15. Mr. Stubbe
Offered in alternate years. Omitted 1954-55.

218. *Introduction to Analysis.* The following topics are studied: the structure of the real number system, algebra of sets, cardinality, sequences and series and certain theorems concerning functions of a real variable. An introduction is made to the study of measure and the Lebesgue integral.
Prerequisite: Course 12.
Through the year. Tu. Th., 2-3:15.
Mr. Gorenstein, *first semester*
Mr. Stubbe, *second semester*
Offered in alternate years. Omitted 1954-55.

219. *Solid Analytic Geometry and Projective Geometry.* Topics of three-dimensional analytic geometry discussed are: planes and lines, matrices, determinants, transformation of coordinates and quadric surfaces. Topics of projective geometry studied are: postulates for projective geometry, homogeneous coordinates, principle of duality, cross ratio, projective transformations and projective theory of curves of the second degree.
Prerequisite: Course 12.
Through the year. M. W. F., 9. Mr. Gorenstein
Offered in alternate years. To be omitted in 1955-56.

Freshman Orientation Course

Orientation. A required non-credit course for freshmen. Two periods per week for the first semester.

Orientation: the history and nature of the university; liberal and vocational education; the curriculum; the individual in relation to the institution, the staff and fellow students; the library; reading; note taking; methods of study; examinations; etc.

Dean Hughes and Dean Borger

Physiology: human anatomy and physiology as related to health, efficiency and human relationships.

Dr. Constantian and Dr. Kressler

Department of Philosophy

PROFESSOR JEFFERSON, ASSISTANT PROFESSOR BECK

The Department of Philosophy offers courses designed to broaden the student's perspective and help him trace the relations among the various fields of knowledge. These courses may also form the basis of a major in philosophy.

A major in this department consists of four courses in philosophy and three additional courses in related fields. The specific courses in related fields are determined in the light of the students' special interests.

Courses in Philosophy

During the academic year 1954-55 the following courses were given: 11a, 11b, 12, 13a, 14, 15b.

Philosophy 11a. Logic and Scientific Method. The principles of valid reasoning and inductive methods; the application of these principles and methods to the problems of the natural and social sciences, and the consideration of the relation between logic and problems of value.

Open to freshmen.

Half course. First semester. M. W. F., 8. MR. BECK

Philosophy 11b. Problems of Philosophy. The nature and method of philosophy. The application of philosophical method to contemporary personal and social problems. A detailed analysis of some typical problems in the various fields of philosophy.

Open to freshmen.

Half course. Second semester. M. W. F., 8. MR. BECK

Philosophy 12. History of Philosophy. The movements of philosophical thought from the early Greeks to the present day. First semester: Greek and Medieval Philosophy. Second semester: Modern Philosophy.

Not open to freshmen.

Divisible course, with consent of the instructor.

Three hours, through the year. M. W. F., 9. MR. JEFFERSON

Philosophy 13a. Problems of Ethics. A constructive study of important ethical theories. Designed to acquaint the student with the problems and scope of ethics, and to aid him in the formulation of an ethical outlook.

Open to juniors and seniors.

Half course. First semester. W. F., 11. MR. BECK

Offered in alternate years. To be omitted in 1955-56.

Philosophy 13b. Social Philosophy. The principles underlying social structure and functions. The examination of the goals, purposes, norms, and ideals of social process, and the relation of that process to the individual good.

Open to juniors and seniors.

Half course. Second semester. W. F., 11. MR. BECK

Offered in alternate years. Omitted 1954-55.

(To be Phil. 14a in 1955-56.)

Philosophy 14. Contemporary Philosophy. An intensive study of important thinkers representative of modern developments in philosophy, together with emphasis on the historical roots of their thought.

Prerequisite: One and one-half courses in philosophy, including Philosophy 12; or permission from the instructor.

Divisible course.

Through the year. Tu. Th., 2. MR. BECK

Offered in alternate years. To be omitted in 1955-56.

(To be Phil. 15 in 1955-56.)

Philosophy 15b. Types of Religious Philosophy. The religious ideas and ideals of Western civilization and their embodiment in specific religious institutions.

Open to juniors and seniors.

Half course. Second semester. W. F., 11.

MR. JEFFERSON AND MR. BECK

Offered in alternate years. To be omitted in 1955-56.

(To be Phil. 13b in 1955-56.)

Philosophy 16a. Readings in Ancient Philosophy. Advanced work in the writings of one or more of the important philosophers of the ancient period. Subject for 1953-54, Plato's *Dialogues.*

Prerequisite: One and one-half courses in philosophy, including Philosophy 12; or permission from the instructor.

Half course. First semester. Hours to be arranged. MR. BECK

Offered in alternate years. Omitted 1954-55.

Philosophy 16b. Readings in Modern Philosophy. Advanced study of representative thinkers of the modern period. Subject for 1953-54, Spinoza.

Prerequisite: One and one-half courses in philosophy, including Philosophy 12; or permission from the instructor.

Half course. Second semester. Hours to be arranged. MR. BECK

Offered in alternate years. Omitted 1954-55.

See also *Education 290b, Philosophy of Education* in the announcement of the Department of Education.

Department of Physics

Professor Roope, Associate Professor Gunter

UNDERGRADUATE WORK

The department offers fundamental courses required in preparation for the study of chemistry, biology, meteorology and allied sciences, medicine, dentistry, engineering and science teaching, as well as courses leading to professional or graduate work in physics.

The requirement for a major in physics consists of Physics 11, two courses from Physics 15, 16, 17, 124, either Physics 22 or 23, Mathematics 11 and 12, and Chemistry 11. In addition, electives in physics, mathematics and chemistry are desirable. Students preparing for graduate work should also obtain a good reading knowledge of French and German while in college.

Physics 11 or its equivalent is the normal prerequisite for all other courses in the department. Courses numbered 15 or higher, except 17 and 124, require the use of calculus and should not be elected without consulting the instructor in charge. Courses 15, 17 and 23 each require a limited amount of laboratory work to be done at the discretion of the instructor and at such times as will not interfere with regularity scheduled courses.

GRADUATE WORK

Students whose records are approved by the department may be admitted by the Graduate Board to work leading to the degree of Master of Arts.

Courses in Physics

During the academic year 1954-55 the following courses were given: 11, 17, 124, 22, 28a, 28b; also General Education 10.

During the year 1955-56 the following undergraduate courses will be offered: 11, 15, 16, 17, 23 and General Education 10.

1. PRIMARILY FOR UNDERGRADUATES

General Education 10. An Introduction to Physical Science. For description of this course see courses listed under General Education.

11. *General Physics.* Mechanics, heat, electricity and magnetism, wave motion, sound, and light.

Indivisible course.

Open to freshmen.

Through the year. Tu. Th., 9; F., 1; Th., 2. MR. GUNTER

13. *History of Physics.* MR. ROOPE

Omitted 1953-54.

15. *Heat and Thermodynamics.* This course includes a study of thermometry, calorimetry, the thermal properties of matter in the solid, liquid and gaseous states, the laws of thermodynamics, and applications to a wide range of phenomena.

Prerequisites: Physics 11 and Mathematics 12.

Through the year. M. W. F., 11. MR. ROOPE

Omitted 1954-55. To be offered in 1955-56.

16. *Optics.* The first semester is devoted to a study of the principles of geometrical optics and their application to various optical instruments, including ground and aerial cameras. The second semester is devoted to the principles and application of physical optics.

Prerequisites: Physics 11 and Mathematics 12 (may be taken concurrently).

Through the year. Tu. Th., 8; Tu., 2. MR. GUNTER

Omitted 1954-55. To be offered in 1955-56.

17. *Introduction to Modern Physics.* An elementary treatment of physical experiment and theory of the past sixty years including the more recent atomic and nuclear developments.

Through the year. M. W. F., 9. MR. ROOPE

124. *Fundamentals of Electronics.* This is a first course in electronics designed to give a broad, largely non-mathematical, background for the understanding of electron tubes and their associated circuits. The application of modern electronic devices to the fields of physics, chemistry, biology, meteorology, and navigation is discussed.

Prerequisite: Mathematics 11.

Through the year. Tu. Th., 8; Tu., 2. MR. GUNTER

Offered 1954-55. To be omitted in 1955-56.

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

22. *Theoretical Mechanics.*

Prerequisite: Mathematics 12. Mathematics 13 is desirable but not required.

Through the year. W. F., 11-12:15. MR. ROOPE

Offered 1954-55. To be omitted in 1955-56.

23. *Electricity and Magnetism.* The fundamental laws of electric and magnetic circuits and fields are treated. The elements of electromagnetic wave propagation and their application to antenna design are included in this treatment.

Prerequisites: Physics 11 and Mathematics 12. Mathematics 13 is desirable but not required.

Tu. Th., 11-12:15; Tu. or Th., 2. MR. GUNTER

Omitted 1954-55. To be offered in 1955-56.

24. *Advanced Electronics.* This course is a detailed theoretical study of certain electronic phenomena from a mathematical point of view.

Prerequisites: Mathematics 12 and Physics 124 or Physics 23. Mathematics 13 is desirable but not required.

Through the year. MR. GUNTER

Omitted 1954-1955.

28a. *Theoretical Spectroscopy.* The origin of line and band spectra in both emission and absorption spectrophotometry is treated.

Prerequisites: Physics 11 and Mathematics 12 (may be taken concurrently). Physics 16 and 17 are desirable but not required.

Half course. First semester. MR. GUNTER

Offered 1954-55. To be omitted in 1955-56.

28b. *Experimental Spectroscopy.* The theory and applications of the optical and electrical instruments used in an experimental spectroscopy are discussed. The student will become familiar with the use of prism and grating spectrographs, micro-densitometers, interferometers, and their associated photographic and electrical techniques. The principles of spectrochemical analysis are included in this course.

Prerequisites: Physics 16 or Physics 28a, and Mathematics 12 (may be taken concurrently). Physics 17 is desirable but not required.

Half course. Second semester. Tu., 11; Tu. Th., 2. MR. GUNTER

Offered 1954-55. To be omitted in 1955-56.

25. *Honors Course.* Theoretical and/or experimental work in mechanics, thermodynamics, or nuclear physics. MR. ROOPE

Omitted 1954-55.

26. *Honors Course.* Theoretical and/or experimental work in optics, electronics, or spectroscopy. MR. GUNTER

Omitted 1954-55.

217. *Nuclear Physics.* MR. ROOPE

Omitted 1954-55.

3. PRIMARILY FOR GRADUATE STUDENTS

31. *Theoretical Physics.* Double Course. MR. ROOPE
300. *Research in Experimental Physics.* THE STAFF
301. *Research in Theoretical Physics.* THE STAFF

Department of Psychology

PROFESSOR WERNER, PROFESSOR AFFILIATE WEINREB, ASSOCIATE PROFESSOR BELL, ASSOCIATE PROFESSOR DEMBO, ASSOCIATE PROFESSOR GWINN, ASSOCIATE PROFESSOR LAZARUS, ASSOCIATE PROFESSOR WAPNER, ASSOCIATE PROFESSOR AFFILIATE MEYER-TAYLOR, ASSOCIATE PROFESSOR AFFILIATE PHILLIPS, ASSISTANT PROFESSOR BAKER, ASSISTANT PROFESSOR AFFILIATE LEVENTHAL, LECTURER KAPLAN, LECTURER LANE, LECTURER VARJABEDIAN

The Psychological laboratories at Clark University were established by G. Stanley Hall immediately after the founding of the University, and constituted one of the first adequately appointed laboratories in this field in America. These laboratories increased rapidly in size and in research possibilities for experimental psychology, and have been remodeled in accordance with present needs. From the outset this research emphasis on experimental psychology was supplemented by work in child study, educational psychology, and mental hygiene. In recent years a comprehensive training program in clinical psychology has been added. Broad integrated training in psychology is stressed, with special concentration being provided in the areas of child and genetic, clinical, and general experimental psychology.

UNDERGRADUATE WORK

The undergraduate curriculum is designed to meet the needs of: (1) students majoring in psychology; (2) majors in related fields; (3) students wishing an orientation to the field of psychology for general cultural development.

Psychology 11a and 11b are prerequisite to all subsequent courses, with the exception of Psychology 190b. Majors are required to take Psychology 11a, 11b, and Psychology 212. Students preparing for graduate work should obtain a reading knowledge of French and German.

GRADUATE WORK

Work is offered in the department leading to the degrees of Master of Arts and Doctor of Philosophy. In order to be admitted to the department for a graduate degree, the applicant must have a bachelor's degree based upon a distinguished college record. Where the department feels that a student lacks the necessary undergraduate preparation in psychology and related fields, specific courses of study will be prescribed.

THE DEGREE OF MASTER OF ARTS. To qualify for the degree of Master of Arts in psychology the student must demonstrate competence in representative areas of psychology. The customary program is five courses, including experimental psychology, statistical methods, and three additional courses supplemented by the writing of a thesis in the area of special interest.

THE DEGREE OF DOCTOR OF PHILOSOPHY. Only students who give evidence of high scholastic attainments will be encouraged to proceed to the degree of Doctor of Philosophy. The obtaining of a Master of Arts degree does not automatically admit the student to the doctoral program. The general requirements for the doctor's degree, other than those for specialization in clinical psychology, include the following. The student is required to pass with distinction four courses during the first year of graduate study and a minimum of four courses during the second year of study. At the end of the second year he is required to demonstrate his competence in psychology by passing with distinction preliminary examinations in the field of psychology as a whole and in an area of specialization. At the present time examinations in the general field include history and systems of psychology, experimental psychology, genetic psychology, learning, normal and abnormal personality, and statistics. In addition, the student is required to demonstrate his ability to conduct independent research as evidenced by the presentation of an acceptable thesis. For formal thesis requirements and language requirements, see the general statement concerning advanced degrees in the section of this catalog headed "The Graduate School." At a final oral examination a student is required to defend his thesis and to show his competence in the general field of psychology and in his special area of concentration.

THE PROGRAM IN CLINICAL PSYCHOLOGY. The department offers a four-year program in clinical psychology leading to the degree of Doctor of Philosophy. For this degree the same standards of proficiency in the general field of psychology as mentioned above apply.

In addition the student will be required to demonstrate mastery of the use of clinical methods. Provision is made for a wide variety of practical experiences in cooperating institutions, clinics, and agencies. V.A. and U.S. Public Health Service Training Stipends are available for outstanding students.

A minimum of two years of internship, or its equivalent, is included in this four-year program. Among the institutions and agencies cooperating in providing practicum and research facilities are: Bedford V.A. Hospital; Boston State Hospital; Boston V.A. Hospital; Boston V.A. Mental Hygiene Clinic; Brockton V.A. Hospital; Children's Medical Center, Boston; Clark University Psychological Clinic; Hartford V.A. Mental Hygiene Clinic; Judge Baker Guidance Center, Boston; Lowell V.A. Mental Hygiene Clinic; Northampton V.A. Hospital; Providence V.A. Mental Hygiene Clinic; Worcester Boys' Club; Worcester Girls' Club; Worcester Youth Guidance Center; and the Worcester State Hospital. Internships may be arranged in other selected hospitals and clinics.

During the first two years the student will include in his program courses basic to a thorough understanding of psychology as well as specialized courses in clinical psychology. He will be required to take the regular preliminary examinations; in this case the examination in the area of specialization will be in clinical psychology.

Research for the dissertation should normally be completed during the fourth year at the University. The length of the program will vary depending upon individual circumstances.

Courses in Psychology

During the academic year 1954-55 the following courses in psychology were given: 11, 172a, 195b, 199a, 200b, 203b, 204a, 212, 300a, 301, 303a, 303b, 306, 307, 313, 315a, 318, 320, 330b, 331, 333, 334, 336, 338b, 339a, 340b, 350, 361, 363, 390.

1. PRIMARILY FOR UNDERGRADUATES

11a. *General Psychology.* An introduction to the principles of human behavior.

Half course. First semester. M. W. F., 10. MR. WAPNER

11b. *General Psychology.*

Prerequisite: Psychology 11a.

Half course. Second semester. M. W. F., 10. MR. WAPNER

172a. *Personality Development.* A survey of the various theoretical approaches to the study of personality, with particular emphasis on trait theories, typologies, field theory, and psychoanalysis. Also considered are the determinants of personality development and methods of appraising personality.

Half course. First semester. Tu. Th., 2-3:15. MR. BAKER

190b. *Applied and Industrial Psychology.* The application of psychological techniques to the problems of business and industry.
Prerequisite: Psychology 11a.
Half course. Second semester.

195b. *The Psychology of Thinking.* An analysis of the various types of thought processes and methods of investigating them, with emphasis on concept formation, imagination, creative thought, reasoning and problem solving.
Half course. Second semester. Tu. Th., 10-11:15. MR. GWINN

198a. *Physiological Psychology.* Physiological methods of investigating the mechanisms underlying psychological processes.
Half course. First semester. MR. GWINN
Omitted 1954-55.

199a. *Learning and Motivation.* The role of learning and motivation in behavior.
Half course. First semester. Tu. Th., 10-11:15. MR. GWINN

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

200b. *Social Psychology.* The role of social factors in the behavior of individuals and of groups. Among the topics to be discussed are suggestion, attitudes, rumor, prejudice, leadership and public opinion polls.
Half course. Second semester. Tu. Th., 8:35-9:50. MR. LAZARUS

203b. *The Abnormal Personality.* The course will be devoted to a study of the development of the abnormal personality and a survey of the major types of abnormal behavior.
Prerequisite: Psychology 172a.
Half course. Second semester. Tu. Th., 2-3:15. MR. BAKER

204a. *Personality Evaluation.* The purpose of this course is to provide an understanding of the principles, problems, and procedures of personality evaluation. It will include consideration of the nature of personality and its measurement, intelligence and its defects, and diagnostic testing designed to explore personality dynamics.
Half course. First semester. Tu. Th., 8:35-9:50. MR. LAZARUS

209. *Developmental and Child Psychology.* A survey of the principles of development and the problems of child psychology.
Prerequisite: Psychology 11 plus one additional semester course in psychology.
Through the year. W. F., 9. A third hour to be arranged.
MR. WERNER

212. *Experimental Psychology.* A general survey of experimental psychology with the aim of acquainting the student with scientific methods and laboratory technique.

Through the year. Lecture: M. W., 11.
Laboratory: M., 2-5. MR. WAPNER

3. PRIMARILY FOR GRADUATE STUDENTS

300. *Genetic Psychology.* A seminar on the basic principles of genetic psychology.

Through the year. MR. WERNER

301. *Clinical Methodology.* An introduction to problems and methods.

Through the year. F., 1-3. MR. LEVENTHAL

302b. *Advanced Psychological Diagnosis of Children.* Special problems and case studies.

Half course. Second semester. Hours to be arranged.
MRS. MEYER-TAYLOR

303a. *Diagnosis of Personality* (Advanced Course).

Prerequisite: Psychology 301.
First semester. W., 3-5. MR. BAKER

303b. *Theories of Psychotherapy.* A comparative study of basic theories of psychotherapy.

Prerequisite: Psychology 303a.
Second semester. W., 3-5. MR. BAKER

305. *Advanced Experimental Psychology.* A study of experimental methodology and techniques. In the first semester attention will be given to problems of perception, and, in the second semester, to memory, concept formation and reasoning.

Through the year. Lecture: Th., 9-11. MR. WERNER
Laboratory: To be arranged. MR. WERNER AND MR. WAPNER

306. *Seminar in Research Methods.*

Through the year. Tu., 9-11. MR. WERNER AND MR. WAPNER

307. *Participation in Psychological Clinic.*

Through the year. F., 3-5. MR. BELL, MR. BAKER, MR. WEINREB
MR. LEVENTHAL, MR. PHILLIPS, AND MR. LAZARUS

313. *Statistical Methods.* The purpose of this course will be to give an understanding of and practice in the statistical methods most valuable in psychological research.

Through the year. Tu., 4-6. MR. LANE

315a. *Experimental Methodology and Design.* A consideration of general experimental methodology in psychology with special reference to the problems of research planning and experimental design. Various fields will be drawn upon for illustrations.

First semester. W., 1-3. MR. WAPNER

318. *Dynamics of Personality.* Emphasis will be placed on the dynamics common to both normal and abnormal manifestations of personality. The first part of the course will consist of a consideration of personality theory and the methodology of personality research. The latter part will be devoted to a survey of the main types of abnormal behavior, including psychoses, and psychoneuroses, and will provide demonstrations of these and other disorders.

Through the year. Th., 10-12. MR. LAZARUS

320. *Interdisciplinary Seminar in Language Behavior.*

Through the year. Hours to be arranged. MR. WERNER, MR. REID

330a. *Psychology of Language Behavior.* A seminar on basic problems pertinent to the experimental study of language.

Half course. First semester. MR. WERNER

330b. *Genetic Psychology of Symbolic Behavior.* A seminar on the basic aspects of symbolic behavior in humans.

Half course. Second semester. F., 2-4. MR. KAPLAN

331. *The Psychology of Learning.* Theoretical viewpoints and experiments in the field of learning.

Through the year. W., 5-7. MR. GWINN

333. *Personality Evaluation.* An advanced course in the integration of methods of personality diagnosis and case history materials.

Through the year. F., 5-7. MR. PHILLIPS

334. *Advanced Problems in Social Psychology.* A seminar on emotional and value aspects of interpersonal relationships. Emphasis is placed on experimental methodology and on the development of theoretical concepts.

Through the year. Th., 7-9 P.M. MISS DEMBO

335b. *Social Psychology.* Topics to be considered in this course are: Opinion Research; Propaganda, Rumor; Group Dynamics; Orientation and Theoretical Problems in Social Psychology.

Omitted 1954-55.

336. *Advanced Problems in Psychotherapy.* This course is offered only to advanced clinical graduate students who are engaged in psychotherapy. The course will consist of discussions of psychotherapeutic problems and theory in connection with case material.

Through the year. Th., 7-9 P.M. MR. WEINREB

338b. *Clinical Neurophysiology.* The study of neurophysiological functions as they pertain to human behavior. MR. VARJABEDIAN

339a. *History and Systems of Psychology.* The historical development of psychological methods, concepts and theories.

First semester. Th., 1-3. MR. GWINN

340b. *Physiological Psychology.* An investigation of the physiological mechanisms underlying psychological processes.

Half course. Second semester. Th., 1-3. Mr. Gwinn

349. *Clinical Research Methodology.* A survey of current research methods in clinical psychology.

First semester. By arrangement. Various Members of
Second semester. By arrangement. the Staff

350. *Research in Psychology.* Individual direction of students in their research projects. Staff of the Department

390. *Departmental Colloquium.*

Through the year. W., 7:45 P.M.
The Staff, Graduate Students
and Visiting Lecturers

FIELD WORK COURSES IN CLINICAL PSYCHOLOGY

(Hours to be arranged)

361. *Required in Conjunction with 301.* Mr. Leventhal

363. *Required in Conjunction with 303a.*

First semester. Mr. Baker

NON-CREDIT WORKSHOPS

1. *Advanced Workshop in Psychological Statistics.*

Selected problems in small sample theory.

Through the year. To be arranged.

2. *Workshops in Clinical Methodology.* Visiting Lecturers

3. *Lectures on Physiological and Medical Aspects of Mind-Body Relationships.* Worcester State Hospital Staff Members
and Visiting Lecturers

Department of Romance Languages

Associate Professor Reid, Associate Professor Nicol, Associate Professor King, Mr. Barbera

Courses offered in the languages and literatures of France, Spain, and Spanish America have been planned to provide:

1) an adequate foundation for graduate study or teaching either French or Spanish, or both;
2) a thorough reading knowledge of both languages, essential for carrying on advanced study in natural sciences, social sciences, and the humanities, and for fulfilling the language requirement for the degree of Bachelor of Arts;

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3) a competent speaking knowledge of both languages.

A major in Romance languages must comprise:

1) four full courses to be chosen from the following:
    French 13, 114, 123a, 151a, 152a, 153b, 154b.
    Spanish 13, 114.
    Romance languages 124b.
2) French 113 or the equivalent.
3) General Education 14, or the equivalent, normally to be completed by the end of the sophomore year.
4) at least one course, to be approved by the department, in non-Romance literature.
5) a satisfactory record in the senior comprehensive examination.

Students majoring in Romance languages are expected to acquire a thorough knowledge of either French or Spanish and are urged to acquire a competent knowledge of the other, both in language and in literature.

If at least two units of elementary Latin or elementary Greek have not been accepted for admission to college, a Romance language major must satisfy the classics requirement as prescribed under the heading "Major" in the statement of requirements for the degree of Bachelor of Arts.

Students intending to major in Romance languages should consult Mr. Reid.

The department wishes to encourage any students who are interested in combining work in French or Spanish with work in another field to consult Mr. Reid regarding the possibilities for interdepartmental major programs.

A program leading to a degree "with honors in Romance languages" is available to qualified upperclassmen.

Courses in French

During the academic year 1954-55 the following courses in French were given: 11, 12, 13b, 14, 114, 152a, 153b and Romance languages 124b.

1. PRIMARILY FOR UNDERGRADUATES

11. *Elementary.* For beginners. The elements of grammar and pronunciation; carefully graded reading; exercises in speaking and writing simple French.

Indivisible course.

Open to freshmen.

Through the year. M. W. F., 10 and Tu. Th., 9; M., 1.

Mr. Nicol and Mr. Reid

12. *Intermediate.* Review of grammar, exercises in composition and pronunciation, intensive and extensive reading in a variety of modern texts.

Prerequisite: French 11 or the equivalent, to be determined by a placement test.

Indivisible course.

Open to freshmen.

Through the year. Tu. Th., 9; F., 1 and Tu. Th., 10; M., 1.

Mr. Reid and Mr. King

NOTE: Courses 13 and 14, described below, are "third-year" language courses within the meaning of the foreign language requirement for the degree of Bachelor of Arts. Course 14 is offered to meet the needs of the general student; course 13 is designed primarily for the student with particular interest and aptitude for language study, who intends to take subsequent courses in literature. Both may be taken for credit.

13. *Oral and Written French.* Third-year course. This course is conducted largely in French. Admission is subject to the approval of the instructor in each semester. The normal sequence is 13 A during the spring semester of one year and 13 B during the following fall semester. The two parts of the course are organized as follows:

A. Analytical study and practice of the elements of communication in French: basic conversational patterns; the sound, rhythm and tone patterns of French pronunciation; advanced review of grammar; exercises in written expression.

Prerequisite: Grade of B— or higher in French 12, or equivalent skill in the language, to be determined by a placement test.

Open to freshman. Mr. Reid

Offered in the spring semester in alternate years.

Omitted 1954-55.

B. Advanced practice of communication in French. Composition, oral reports, classroom discussion.

Not open to freshmen.

M. F., 9; Laboratory W., 1-3. Mr. Nicol and Mr. King

Offered in the fall semester in alternate years.

To be omitted in 1955-56.

14. *Readings in French Literature.* Third-year course. The emphasis in the first semester is on reading as communication, with analysis and practice of the techniques of effective reading in French. The emphasis in the second semester is on an understanding of a number of French works of universal importance and appeal.

Prerequisite: French 12 or the equivalent, to be determined by a placement test.

Open to freshmen.

Through the year. M. W. F., 9 and 10. Mr. Reid, *first semester*
Mr. Nicol, *second semester*

113. *Introduction to French Civilization.* A selective survey of the history, art, literature and music of France, from the Middle Ages to the present time. An elementary reading knowledge of French is desirable but not required. Admission is subject to the approval of the instructor.

French 113 may be counted in fulfillment of the general requirement in art, music and literature, but not toward fulfillment of the requirement in foreign language.

Some meetings are held in the Worcester Art Museum.

Through the year. Mr. Nicol

Offered in alternate years. Omitted in 1954-55.

114. *General View of French Literature.* An interpretation of the main currents of French literature. Each period is studied by concentrating attention on a limited number of works and authors best bringing to focus the characteristics of the period.

Prerequisite: Grade of B— or higher in French 13 or 14 or the equivalent.

Through the year. M., 3; W., 9; Th., 12:30. Mr. King

123a. *Advanced Language.* Advanced composition and special study of grammatical topics.

Prerequisite: Grade of B— or higher in French 13B.

Half course. First semester. Mr. Nicol

Omitted in 1954-55. Offered when the demand warrants.

Romance Languages 124b. Comparative French and Spanish Phonetics. The elements of general phonetics. A detailed study of the pronunciation of French and Spanish. A required course for majors who wish to be recommended for teaching either language.

Prerequisite: Grade of B— or higher in French 13A or Spanish 13; elementary knowledge of the other language.

Half course. Second semester. M. F., 9; Laboratory W., 1-3.
Mr. Reid

Offered in alternate years. To be omitted 1955-56.

NOTE: The following four courses presuppose a certain historical and analytical perspective such as is provided by French 114. They are so planned, however, that a chronological order is not necessary; they may be taken in any order that suits the student's convenience.

In all of these courses attention is given to the social forces and movements underlying the attitudes whose literary manifestations are under study.

151a. *The Middle Ages and the Renaissance.* Conducted in French.

Prerequisite: Grade of B— or higher in French 114, or the equivalent.

Half course. First semester. Mr. King

New course. To be offered in alternate years beginning 1955-56.

152a. *Classicism.* A study of outstanding literary works, drawn principally but not exclusively from the age of Louis XIV, to illustrate the esthetic and intellectual nature of the classical point of view as it persists in the French thought of various periods. Conducted in French.

Prerequisite: Grade of B— or higher in French 114, or the equivalent.

Half course. First semester. Tu. F., 2-3:15 Mr. Nicol

Offered in alternate years. To be omitted in 1955-56.

153b. *Romanticism and Realism.* A study of outstanding literary works, drawn principally but not exclusively from the late 18th and the 19th Centuries, to illustrate the esthetic and intellectual climates and the literary techniques generally described as romantic or realistic. Conducted in French.

Prerequisite: Grade of B— or higher in French 114, or the equivalent.

Half course. Second semester. Tu. F., 2-3:15. Mr. Nicol

Offered in alternate years. To be omitted in 1955-56.

154b. *The Modern Period.* Conducted in French.

Prerequisite: Grade of B— or higher in French 114, or the equivalent.

Half course. Second semester. Mr. Nicol

New course. To be offered in alternate years beginning 1955-56.

Courses in Spanish

During the academic year 1954-55 the following courses were given: 11, 12, 13, 14 and Rom. Lang. 124b.

1. PRIMARILY FOR UNDERGRADUATES

11. *Elementary.* For beginners. The elements of grammar and pronunciation; carefully graded reading; exercises in speaking and writing.

Indivisible course.

Open to freshmen.

Through the year. Tu. Th., 8; F., 2 and Tu. Th., 10; M., 1.

Mr. Barbera and Mr. Reid

12. *Intermediate.* Review of grammar, exercises in composition and pronunciation, intensive and extensive reading of texts dealing with Spain and Spanish America.

Prerequisite: Spanish 11, or the equivalent, to be determined by a placement test.

Indivisible course.

Open to freshmen.

Through the year. M. W. F., 8. Mr. Barbera

NOTE: The note preceding the description of French 13 and 14 applies equally to Spanish 13 and 14.

13. *Third-Year Oral and Written Spanish.* A rapid intensive review of grammar; the elements of phonetics; exercises in composition and pronunciation; conversational practice. Course 13 is conducted largely in Spanish.

Prerequisite: Grade of B— or higher in Spanish 12, or equivalent skill in the language, to be determined by a placement test. Admission is subject to the approval of the instructor.

Open to freshmen.

Through the year. Tu. Th., 10; Laboratory M., 1-3. Mr. King and Mr. Barbera

Offered in alternate years. To be omitted in 1955-56.

14. *Readings in Spanish and Spanish-American Literature.* Third-year course. The first semester is devoted to Spanish American, the second semester to Spanish works. The emphasis in the first semester is on reading as communication, with analysis and practice of the techniques of effective reading in Spanish. The emphasis in the second semester is on the understanding of a number of major works of the literature of Spain, having universal importance and appeal.

Prerequisite: Spanish 12, or the equivalent, to be determined by a placement test.

Open to freshmen.

Through the year. M. W. F., 10. Mr. Barbera

114. *The Literature of Spain.* A general view of Spanish literature with emphasis on the study of the origins and development of the novel and drama, culminating in the masterworks of the nineteenth century. Necessary attention is given to political and cultural background.

Prerequisite: Grade of B— or higher in Spanish 13 or 14 or the equivalent.

Through the year. Mr. Barbera

Offered in alternate years. Omitted 1954-55.

Romance Languages 124b. Comparative French and Spanish Phonetics. The elements of general phonetics. A detailed study of the pronunciation of French and Spanish. A required course for majors who wish to be recommended for teaching either language.

Prerequisite: Grade of B— or higher in French 13A, or Spanish 13; elementary knowledge of the other language.

Half course. Second semester. M. F., 9; Laboratory W., 1-3.
Mr. Reid

Offered in alternate years. To be omitted in 1955-56.

Russian

These courses are offered to enable students to acquire a reading knowledge of the language.

Russian 11. Elementary Russian. Basic grammar and vocabulary.
Through the year. M. W. F., 11. Mrs. Brahm

Russian 12. Intermediate Russian. Advanced grammar. Reading and conversation.
Through the year. M. W. F., 11. Mr. Raeff

Russian 13. Advanced Russian. Intensive reading of contemporary and literary sources.
Through the year. M. W. F., 12. Mr. Raeff

Sociology

A description of the offerings in Sociology will be found in the announcement of the Department of Economics and Sociology.

Spanish

A description of the offerings in Spanish will be found in the announcement of the Department of Romance Languages.

The Summer School — 1955

Intersession June 6 — June 25

Summer Session June 27 — August 10

A six-week summer school was established in 1921, primarily to serve teachers who were employed during the regular academic year. Its organization and its offerings were relatively independent of the general university program.

The national emergency beginning in 1941 made it desirable to provide opportunities for college students tc complete their requirements for a bachelor's degree in as short a time as possible. Accordingly the summer school was lengthened to twelve weeks and made an integral part of the college program. With the passing of the emergency and with the demands for acceleration decreasing, the twelve-week summer was last held in 1949 and in 1951.

For the summer of 1950 a return was made to a summer session of approximately six weeks duration. This program with slight modifications was repeated in 1952, 1953 and 1954.

With the impending increase in college students, the Summer School for 1955 has been revised to offer a larger variety of courses to undergraduates, graduate students and teachers alike, and to permit students to obtain a larger number of academic credits. The Intersession, a three weeks period of concentrated study, and the Summer Session of 6½ weeks permit the student to take three semester courses (9 semester hours of credit). Evening courses are also scheduled permitting students to continue their education during the summer while engaged in part-time employment. To broaden his intellectual horizons the student is also encouraged to engage in informal afternoon seminars, special evening lectures, conferences, to take week-end excursions to famous New England cultural centers and to participate in the various social events.

Work done in the summer term may be counted toward the fulfillment of the requirements for the degrees of Bachelor of Arts, Bachelor of Business Administration, Master of Arts, and Doctor of Philosophy. A graduate student should secure the explicit approval of his major department for any program undertaken during the summer term.

The Summer School Staff — 1955

Howard B. Jefferson, President of Clark University
Rudolph F. Nunnemacher, Director of the Summer School

Only the visiting lecturers in the Summer School are listed herewith; the regular members of the Clark Faculty are listed elsewhere.

Marvin D. Bernstein, Ph.D., Visiting Lecturer, Instructor, Worcester State Teachers College

Albert S. Carlson, Ph.D. Visiting Lecturer, Professor of Geography, Dartmouth College

Francis O. Graf, A.B., Visiting Lecturer, Manager, Connecticut General Life Insurance Company

Sante Graziani, M.F.A., Visiting Lecturer, Head of the School of the Worcester Art Museum

Edward H. Hastings, M.A., Visiting Lecturer in Clark University Evening College

Albert Morris, Ph.D., Visiting Lecturer, Chairman, Department of Sociology and Anthropology, Boston University

Harris Rosenkrantz, Ph.D., Visiting Lecturer, Staff member, Worcester Foundation for Experimental Biology

Dayton D. Shepherd, M.A., Visiting Lecturer, Principal of Durham School, Durham, Connecticut

Irwin M. Tobin, Visiting Lecturer, Labor Attaché, American Embassy, Vienna

Courses Offered in the Summer School

Courses are identified by number. Any particular course bears the same identifying number whether it is offered during the regular academic year or in the summer term. Courses primarily for undergraduates have numbers beginning with the numeral "1," those for advanced undergraduates and graduate students, with the numeral "2," and those primarily for graduate students, with the numeral "3."

BIOLOGY

I	S.11a	General Biology (Botany)	Mr. Potter
	S.17	General Ecology	Mr. Potter
	S.19	Human Anatomy and Physiology	Mr. Nunnemacher
	S.244	Biochemistry	Mr. Rosenkrantz

BUSINESS ADMINISTRATION

	S.129	Federal Income Taxation	Mr. Hargest
	S.131	Human Relations and Policy Making in Business and Industry (Soc. S.131)	Mr. Killian
I	S.150	Elements of Insurance	Mr. Graf
E	S.184	Time and Motion Study	Mr. Nordstrom

I Intersession—June 6—June 25.
E Evening classes—Summer Session.

ECONOMICS

E S.13	Money and Banking	Mr. Maxwell
I S.17	The New England Economy	Mr. Melder
S.19	Economics of Transportation	Mr. Collazzo

EDUCATION

S.211	Methods and Materials in Character and Citizenship Education	Mr. Jones
***S.217	The Use of Community Resources in Teaching	Mr. Borger
**S.223	Demonstration of Materials and Methods in Teaching	Mr. Shepherd
S.241	Educational Psychology—A Study of the Individual	Mr. Jones
***S.261	Management and Administration in the Elementary and Junior High School	Mr. Shepherd

ENGLISH

S.11a	Composition and Literature	Mr. Anderson
S.12	Public Speaking (B.A. S.17)	Mr. Letendre
S.15	Survey of American Literature	Mr. Anderson
E S.125	The Short Story	Mr. Carter
S.126	Modern American and British Drama	Mr. Letendre
S.17	Great English Writers	Mr. Carter

FINE ARTS

I S.122	Introduction to Symphonic Music	Mr. Hastings
E S.195	Introduction to Contemporary Art	Mr. Graziani

GEOGRAPHY

I S.12	Introduction to Climatology	Mr. Warman
**S.20	Geography in Education (Ed. S.20)	Mr. Warman
***S.28	The Future of New England	Mr. Carlson
S.191	Cartography	Mr. Burnham
S.261	The American City	Mr. Murphy
I S.298	Map and Aerial Photo Interpretation	Mr. Brunnschweiler

HISTORY AND GOVERNMENT

E S.15b	Introduction to American Government	Mr. Bernstein
I S.205	Freedom and Communism	Mr. Jordan
S.215	Western and Central Europe Since 1945	Mr. Tobin
S.233	New Viewpoints in American History	Mr. Campbell
S.235	The U. S. in the 20th Century	Mr. Campbell
S.237	Development of U. S. Foreign Policy Since 1918	Mr. Tobin

LANGUAGE

S.115	Man and Language	Mr. Reid
*S.12	Intermediate French	To be announced
*S.14	Readings in French Literature	To be announced
*S.11	Beginning German	Mr. Edwards
*S.12	Intermediate Spanish	To be announced
*S.14	Readings in Spanish and Spanish American Literature	To be announced

MATHEMATICS

S.13b	Differential Equations	Mr. Stubbe
S.216	Advanced Differential Equations	Mr. Stubbe

PHILOSOPHY

S.13	Ethics and the Good Life	Mr. Beck
I S.121	Classical American Philosophers	Mr. Beck

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*Double Course, two classes daily through summer session.

**Double Course, two classes daily, first three weeks, June 27—July 15.

***Double Course, two classes daily, second three weeks, July 18—August 10.

PSYCHOLOGY

E S.190	Industrial Psychology	Mr. Kaplan
S.170	Introduction to Child Psychology	Mr. Kaplan
I S.234	Psychology of Personality and Inter-personal Relationships	Miss Dembo

SOCIOLOGY

S.11b	Analysis of Our Society	Mr. Killian
***S.12	Peoples of the World	Mr. Morris

All single courses are semester courses giving 3 hours credit. Those beginning with the number "1" are for undergraduates only, while those beginning with "2" are for advanced undergraduates or graduates. Students may carry one course in the Intersession and two day or evening classes in the Summer Session. *Tuition* per course is $60, matriculation fee for students not previously enrolled at Clark University is $5, the activities fee $3. Living quarters are available in the College dormitories for $5 a week. *Registration* for the *Intersession* and the first class meeting will be on June 6, for the *Summer Session* on June 27 with classes beginning on the following day. Registration in advance is requested.

The Summer School catalogue or additional information may be obtained from Dr. R. F. Nunnemacher, Director of the Summer School, Clark University, Worcester, Massachusetts.

Summer School Staff — 1954
June 28 — August 11

HOWARD B. JEFFERSON, *President*
HOMER P. LITTLE, *Dean of the College and*
Director of the Summer School

Only the visiting lectures in the Summer School, 1954, are listed herewith; the regular members of the faculty are listed elsewhere.

PAUL D. COLLIER, *Co-director,* Division of Instructional Services, State Dep't. of Education, Hartford, Connecticut

RAYMOND F. COOK, M.ED., Newton Public School System, Newton, Massachusetts

WILBUR J. ROOK, M.A., Wellesley Public School System, Wellesley, Massachusetts

JOHN H. MACKENZIE, M.A., Assistant Professor of English, Worcester Polytechnic Institute

EARL B. SHAW, PH.D., Professor of Geography, State Teachers College at Worcester, Massachusetts

Courses Given in 1954

Biol. SS 17. *Animal Ecology.*	Mr. Nunnemacher
Educ. SS 212. *Principles and Practices of Guidance.*	Mr. Lane
Educ. SS 290b. *Philosophy of Education.*	Mr. Beck
Educ. SS 222D. *School Administration and Supervision.*	Mr. Collier
Educ. SS 259. *Methods and Materials in Elementary Education.*	Messrs. Cook and Rook
Educ. SS 262. *The Curriculum Development in Elementary Education.*	Messrs. Cook and Rook
Educ. SS 210. *Psychological Approach to Citizenship Development.*	Mr. Jones
Educ. SS 210D. *Education for Citizenship.*	Mr. Jones
Eng. SS 12. *Public Speaking.*	Mr. Mackenzie
Eng. SS 142. *The Modern Novel.*	Mr. Bradley
Eng. SS 126. *The Modern Drama.*	Mr. Bradley
Geog. SS 27. *Principles of Human Geography.*	Mr. Shaw
Geog. SS 26. *Principles of Economic Geography.*	Mr. Shaw
Geog. SS 201. *Elements of Political Geography.*	Mr. Van Valkenburg
Geog. SS 191. *Cartography.*	Mr. Burnham
Ger. SS 11. *Introductory German.*	Mr. Arndt
Hist. SS 201. *New Viewpoints in History.*	Mr. Lee
Hist. SS 233. *The American Tradition.*	Mr. Campbell
Hist. SS 235. *The United States in the Twentieth Century.*	Mr. Campbell
Soc. SS 11a. *Principles of Sociology.*	Mr. Killian
Soc. SS 27. *The Family and the School in the Community.*	Mr. Killian

The Evening College

The Evening College of Clark University was established by the Trustees on the recommendation of the Faculty in September 1953. In respect to both educational policies and financial administration, the Evening College is independent of the older undergraduate colleges (the Men's College and the Women's College). The administration of the Evening College is in the hands of the Director, Robert M. Hyde and the Evening College Board. For 1954-55 the Board consists of H. Donaldson Jordan, Frederick W. Killian, Joseph A. Nordstrom, J. Richard Reid, Percy M. Roope and Seymour Wapner. The teaching staff has been selected primarily from the staff of the University.

The educational offerings, which parallel those of the older colleges, are available to the community in the late afternoon and in the evening. They provide the basis for programs of study leading to the degrees of Bachelor of Science in General Studies and Bachelor of Science in Business Administration. The requirements for these degrees are in general similar to the requirements for the degrees of Bachelor of Arts and Bachelor of Business Administration respectively but permit a somewhat greater latitude in the choice of courses.

Admission to the Evening College is open to high school graduates and to others who give evidence of maturity and seriousness of purpose. Progress toward a degree is contingent on satisfactory performance in Evening College courses. In general a full program of courses, three courses carried simultaneously, will enable a student to complete the requirements for a degree in seven or eight years.

The service of the Evening College to the community is not restricted to candidates for a degree. Those who may wish to broaden their intellectual horizons, or to extend their understanding of particular subjects, or to secure additional training in fields related to their daily occupations are welcomed as students. They will find among the courses offered a great variety of subject matter—and among the instructors, complete sympathy with their purposes.

In cooperation with Boston University the Evening College offers a group of courses in nursing—primarily for graduate nurses—which may be credited toward the degree of Bachelor of Science in Nursing at Boston University.

STAFF OF THE EVENING COLLEGE, 1954-55

HOWARD B. JEFFERSON, President of Clark University
ROBERT M. HYDE, Director of the Evening College

MISS HELEN G. AGBAY, M. A.; Spanish
Teacher, Junior High School, Worcester, Massachusetts
RAYMOND E. BARBERA, Doctor en Letras; Spanish
Instructor in Romance Languages, Clark University
ROBERT N. BECK, PH.D.; Education and Philosophy
Assistant Professor of Philosophy, Clark University
JOHN L. BRADLEY, PH.D.; English
Assistant Professor of English, Clark University
PHILIP H. BREEN, LL.B.; Business Law
Lecturer in Business Law
DIETER BRUNNSCHWEILER, PH.D.; Geology
Assistant Professor of Geography, Clark University
CHARLES T. BUMER, PH.D.; Mathematics
Professor of Mathematics, Clark University
ROBERT F. CAMPBELL, PH.D.; History
Associate Professor of American History, Clark University
WILLIAM H. CARTER, JR., PH.D.; English
Assistant Professor of English, Clark University
CHARLES J. COLLAZZO, JR., M.C.S.; Business Administration
Assistant Professor of Business Administration
BESS ELLISON, Nursing
Assistant Professor, Boston University School of Nursing
ELIZABETH J. HALL, ED.M.; Nursing
Professor of Nursing, Boston University School of Nursing
GEORGE E. HARGEST, M.B.A.; Business Administration
Associate Professor of Economics and Business Administration, Clark University.
WILLIAM E. HARRIS, B.A.; English—Creative Writing
Lecturer
EDWARD H. HASTINGS, M.A.; English and Music
Formerly Instructor in English, Clark University
SHERMAN S. HAYDEN, PH.D.; History
Associate Professor of International Relations, Clark University
RUTH HYATT; Library Techniques
Librarian, Fitchburg Public Library

Robert S. Illingworth, M.A., Ed.M.; English
Professor of Speech and Drama, Clark University
Armen Jerejian, D. ès Sc. Péd., Agrégé; Armenian
Lecturer in Armenian, School of General Studies, Columbia University
Arsen Jerejian, Armenian
Lecturer in Armenian
Bernard Kaplan, Ph.D.; Psychology
Lecturer in Psychology, Clark University
Frederick W. Killian, LL.B.; Sociology and Business Administration
Associate Professor of Sociology, Clark University
Richard S. Lazarus, Ph.D.; Psychology
Associate Professor of Psychology, Clark University
Dwight E. Lee, Ph.D.; History
Professor of Modern European History, Clark University
Theodore Leventhal, Ph.D.; Psychology
Assistant Professor (Affiliate) in Psychology, Clark University
Samuel J. Lukens, Ph.D.; Business Administration
Lecturer in Business Administration
F. Eugene Melder, Ph.D.; Business Administration
Associate Professor of Economics, Clark University
George H. Merriam, A.M.; History
Director of Admissions, Clark University
Albert Morris, Ph.D.; Sociology
Chairman, Department of Sociology, Boston University
Jason E. Newton, M.A.; Business Administration
Lecturer in Business Administration
Joseph A. Nordstrom, M.S.; Business Administration
Assistant Professor of Business Administration, Clark University
Rudolph F. Nunnemacher, Ph.D.; Biology
Associate Professor of Biology, Clark University
David Potter, Ph.D.; Biology
Professor of Biology, Clark University
Relly I. Raffman, M.A.; Music
Instructor in Music, Clark University
Charles L. Sanders, M.B.A., C.P.A.; Business Administration
Instructor in Business Administration
Eva Schadt, B.S.; Nursing
Associate Professor of Nursing, Boston University

SHELDON SCHAFFER, M.A.; Economics
Lecturer in Economics
JOHN S. STUBBE, PH.D.; Mathematics
Associate Professor of Mathematics, Clark University
GRACE O. TAYLOR; Library Techniques
Lecturer
ROGER C. VAN TASSEL, M.A.; Economics
Assistant Professor of Economics, Clark University
SEYMOUR WAPNER, PH.D.; Psychology
Associate Professor of Psychology, Clark University
HENRY J. WARMAN, PH.D.; Geography
Associate Professor of Geography, Clark University
EVELYN WEACHTER; Library Techniques
Lecturer
GEORGE J. WHITE, M.B.A., C.P.A.; Business Administration
Lecturer

Courses Given in the Evening College, 1954-55

The numerals 1 and/or 2 following the title of a course indicate the semester or semesters in which the course has been given.

LANGUAGES, LITERATURE AND FINE ARTS

Armenian E 1. *Armenian Language, Elementary* (1) MR. JEREJIAN
Armenian E 2. *Armenian Language, Elementary* (2) MR. JEREJIAN
Armenian E 3. *Armenian Language, Intermediate* (1) MR. JEREJIAN
Armenian E 4. *Armenian Language, Intermediate* (2) MR. JEREJIAN
English E 11. *English Composition and Literature* (1, 2) MR. CARTER AND MR. HASTINGS
English E 12. *Public Speaking* (1) MR. ILLINGWORTH
English E 13. *Public Speaking and Human Relations* (2) MR. ILLINGWORTH
English E 16. *Creative Writing* (1, 2) MR. HARRIS
English E 117b. *English Romantic Poetry* (2) MR. BRADLEY
English E 143. *The Modern Novel* (1) MR. BRADLEY

Music E 13. *Twentieth Century Music* (2) Mr. Raffman
Music E 19. *The Development of the Symphony* (1)
Mr. Hastings
Music E 21. *Masterpieces of Choral Music* (2) Mr. Hastings
Spanish E 11. *Beginning Spanish* (1, 2) Miss Agbay
Spanish E 12. *Intermediate Spanish* (1, 2) Mr. Barbera

SCIENCE AND MATHEMATICS

Botany—The Identification of Wild Flowering Plants (2)
Mr. Potter
Biology—Human Reproduction (2) Mr. Nunnemacher
Geology E 12. *Introduction to General Geology* (1, 2)
Mr. Brunnschweiler
Mathematics E 17. *Mathematics of Statistics* (1) Mr. Bumer

SOCIAL STUDIES

Armenian E 116. *History and Culture of Armenia and the Near East, Middle Ages* (1, 2)
Mr. Jerejian
Economics E 111. *Principles of Economics* (1, 2)
Mr. Van Tassel
Economics E 21a. *Business Cycles and National Income* (1)
Mr. Schaffer
Economics E 209. *American Industrial Practise and Public Policy* (2) Mr. Schaffer
Economics E 211. *Capitalism, Socialism and Democracy* (2)
Mr. Schaffer
Geography E 112. *Why the Weather?* (1) Mr. Warman
History E 23. *American Colonial History, 1607-1775* (2)
Mr. Merriam
History E 117. *Europe in Two World Wars* (2) Mr. Lee
History E 235 TV. *America Comes of Age* (2) Mr. Campbell
International Relations E 24. *The Course of World Politics 1933-1954* (1) Mr. Hayden
Philosophy E 15b. *Types of Religious Philosophies* (2) Mr. Beck
Philosophy E 13. *Introduction to Social Philosophy* (1) Mr. Beck
Psychology E 111. *General Psychology* (1, 2) Mr. Wapner
Psychology E 103. *Normal Personality* (1) Mr. Lazarus
Psychology E 171. *The School and Adolescent Child* (1)
Mr. Leventhal
Psychology E 200. *Social Psychology* (SS) Mr. Kaplan

Psychology E 194. *The Pre-School Child* (2)	Mr. Leventhal
Psychology E 203. *Abnormal Personality* (2)	Mr. Lazarus
Sociology E 12. *Peoples of the World* (1)	Mr. Morris
Sociology E 11. *Understanding our Society* (2)	Mr. Morris

BUSINESS ADMINISTRATION

B.A., E 13. *Business Mathematics* (1, 2)	Mr. Stubbe
B.A., E 16. *Business Statistics* (1, 2)	Mr. Nordstrom
B.A., E 20. *Business Law* (1, 2)	Mr. Breen
B.A., E 10. *Elements of Production* (SS)	Mr. Nordstrom
B.A., E 112. *Introduction to Personnel Management* (1, 2)	Mr. Lukens
B.A., E 117. *Principles of Accounting* (1, 2)	Mr. Hargest and Mr. Sanders
B.A., E 113. *Credits and Collections* (2)	Mr. Collazzo
B.A., E 124. *Principles of Marketing* (1)	Mr. Collazzo
B.A., E 127. *Intermediate Accounting* (1, 2)	Mr. White
B.A., E 128. *Cost Accounting* (1, 2)	Mr. Newton
B.A., E 183. *Management-Employee Relations* (1)	Mr. Melder
B.A., E 131b. *Human Relations and Policy Making in Business and Industry* (1)	Mr. Killian
B.A., E 186. *Law, Policy and Industry* (2)	Mr. Killian

COURSES OFFERED BY THE BOSTON UNIVERSITY SCHOOL OF NURSING IN THE EVENING COLLEGE OF CLARK UNIVERSITY

NU. 190X. *Modern Concepts of Medical-Surgical Nursing* (1)	Miss Schadt
NU. 209X. *Child Growth and Development* (1)	Miss Hall
NU. 450X. *Ward Administration* (2)	Mrs. Ellison

LIBRARY

Li. E 1. *Training Program in Library Techniques* (SS)	Miss Hyatt, Miss Taylor, Miss Weachter

Register and Directories

Trustees
Administration
Academic Boards and Committees
Faculty
Special Graduate School Appointments
Students — 1954-55
Degrees — 1954

Board of Trustees

Final authority in all matters pertaining to the University is lodged in the Board of Trustees by charter granted by the General Court of the Commonwealth of Massachusetts.

Francis H. Dewey, Jr. (1934)	Worcester, Mass.
Robert H. Loomis (1936), President	Boston, Mass.
Frank L. Adams (1938)	Worcester, Mass.
Howard M. Booth (1939)	Worcester, Mass.
Samuel H. Dolbear (1940)	New York, N. Y.
Carl E. Wahlstrom (1942), Vice-President	Worcester, Mass.
Raymond T. Gifford (1947), Treasurer	Worcester, Mass.
John Jeppson (1948)	Worcester, Mass.
Harry C. Coley (1948)	Worcester, Mass.
Roland A. Erickson (1951)	Worcester, Mass.
Joseph C. Molder (1954), Secretary	Worcester, Mass.

ELECTED TO REPRESENT THE ALUMNI
(Four Year Term)

Henry C. Marble (1951)	Boston, Mass.
Herbert F. Lange (1952)	Detroit, Mich.
Hugh L. Keenleyside (1953)	Larchmont, N. Y.
Maxwell B. Seder (1954)	Worcester, Mass.

Administration

Office of the President

Howard B. Jefferson, President of the University
Robert P. Anderson, Assistant to the President
Irma M. Brown, Secretary to the President
Jewel A. Emory, Director of the News Bureau

Office of the Colleges

H. Donaldson Jordan, Chairman of the College Board
Henry C. Borger, Jr., Dean of Men
M. Hazel Hughes, Dean of Women
George E. Hargest, Acting Director of the Division of Business Administration
George H. Merriam, Director of Admissions

James M. Coffee, Director of Placement and Vocational Counselor
Gladys Diliberto, Secretary to the Dean of Men and to the Chairman of the College Board

Office of the Graduate School

Dwight E. Lee, Secretary of the Graduate Board and Secretary of the Committee on Credentials
Samuel Van Valkenburg, Chairman of the Committee on Credentials

Office of the Evening College

Robert M. Hyde, Director

Office of the Treasurer

Raymond T. Gifford, Treasurer 18 Chestnut St., Worcester, Mass.
Patrick V. Sheehan, Assistant Treasurer
Mary A. Hubbard, Bursar
Alice M. Currie, Assistant Bursar
Richard J. Courtney, Manager of the Bookstore

Office of the Librarian

Tilton M. Barron, Librarian
Marion Henderson, Reference Librarian

Office of the Registrar

Lydia P. Colby, Registrar

Office of the Medical Director

Michael B. Fox, M.D., Medical Director
Milton H. Yuddell, M.D., Medical Director
Winifred Nagle, R.N., Nurse in charge of Infirmary

Office of Physical Education

Rocheleau Z. Granger, Jr., Director of Physical Education for Men
M. Hazel Hughes, Director of Physical Education for Women
Festus G. Amsden, Assistant Director of Physical Education for Men
Frances Cockrell, Assistant Director of Physical Education for Women

Office of the Alumni Association

George E. Allen, Alumni Secretary (until January 1, 1955)
Henry L. Signor, Alumni Secretary (after January 1, 1955)

Academic Boards and Committees

THE UNIVERSITY FACULTY

The Faculty consists of the President, the Librarian, and all members of the staff giving regular courses of instruction. It has immediate supervision over the general education work of the university and is responsible for the nomination to the Board of Trustees of candidates for baccalaureate degrees and for honorary degrees.

Secretary of the Faculty, Sherman S. Hayden.

THE UNIVERSITY SENATE

The Senate consists of the President as chairman, and not less than six members of the Faculty appointed by the President. Its duties are to "advise the President with regard to questions of general policy and such other matters as may be laid before it by the President." It may bring appropriate matters to the attention of the Faculty, the Graduate Board and the Collegiate Board. It may recommend to the Faculty candidates for honorary degrees.

President Howard B. Jefferson, *Chairman*

Karl O. E. Anderson
Jesse L. Bullock
Charles T. Bumer
Robert S. Illingworth
Vernon Jones
H. Donaldson Jordan
Dwight E. Lee
James A. Maxwell
David Potter
Percy M. Roope
Samuel Van Valkenburg
Heinz Werner

THE GRADUATE BOARD

The Graduate Board consists of the President and representatives of the departments offering advanced graduate instruction. It has general control of the work of the Graduate Division and is responsible for the nomination to the Board of Trustees of candidates for the degree of Master of Arts and of Doctor of Philosophy.

President Howard B. Jefferson, *ex officio*

John E Bell
Jesse L. Bullock
Sherman S. Hayden
Vernon Jones
H. Donaldson Jordan
Arthur E. Martell
James A. Maxwell
F. Eugene Melder
Raymond E. Murphy
David Potter
Percy M. Roope
Samuel Van Valkenburg
Seymour Wapner
Heinz Werner

Dwight E. Lee, *Secretary*

THE COLLEGE BOARD

The College Board consists of the President, the Dean of Men, the Dean of Women, the Chairman of the College Board, and six members of the Faculty, appointed by the President. It has immediate supervision over the work of the Undergraduate Division, subject to the control of the Faculty, and recommends to the Faculty candidates for the Bachelor of Arts and Bachelor of Business Administration degrees.

President Howard B. Jefferson, *ex officio*
Dean Henry C. Borger, Jr., *ex officio*
Dean M. Hazel Hughes, *ex officio*

H. Donaldson Jordan, *Chairman*

Karl O. E. Anderson
Robert F. Campbell
Gerson Kegeles
J. Fannin King
Joseph A. Nordstrom

John S. Stubbe, *Secretary*

THE EVENING COLLEGE BOARD

The Evening College Board consists of the President, the Director of the Evening College, and six members of the Faculty, appointed by the President. It has immediate supervision, subject to the control of the Faculty, over the Evening College, and recommends to the Faculty candidates for the Bachelor of Science degrees.

President Howard B. Jefferson, *ex officio*
Robert M. Hyde, Director, *ex officio*

H. Donaldson Jordan
Frederick W. Killian
Joseph A. Nordstrom
J. Richard Reid
Percy M. Roope
Seymour Wapner

THE ACADEMIC COUNCIL

The Council, established by vote of the faculty, is appointed by the President of the University subject to regulations providing for the distribution of its membership among the various divisions and departments.

Its duties are to make recommendations regarding undergraduate educational policies to check on the program of courses offered to undergraduates and to supervise honors work, senior surveys, and comprehensive examinations.

President Howard B. Jefferson, *ex officio*
H. Donaldson Jordan, *ex officio*
Daniel Gorenstein, *Chairman*
S. P. Cowardin, III, *Secretary*

Raymond E. Barbera
William H. Carter
Gordon T. Gwinn
Gerson Kegeles
Richard J. Lougee
James A. Maxwell
David Potter

ADMINISTRATIVE COMMITTEE FOR THE DIVISION OF BUSINESS ADMINISTRATION

President Howard B. Jefferson, *ex officio*
*Eugene J. Kelley, *Chairman*
George E. Hargest, *Acting Chairman, 1954-55*

John E. Bell
H. Donaldson Jordan
James A. Maxwell
Raymond E. Murphy
Joseph A. Nordstrom

THE COMMITTEE ON PERSONNEL AND ORGANIZATION

Elected to advise the President regarding the personnel and the organization of departments.

Charles T. Bumer
H. Donaldson Jordan
James A. Maxwell
David Potter
Percy M. Roope
Heinz Werner

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*Absent on leave, 1954-55.

THE LIBRARY COMMITTEE

Robert E. Campbell, *Chairman*

Karl J. Arndt
Roy C. Gunter, Jr.

ATWOOD HALL COMMITTEE

Robert P. Anderson, *Chairman*

Donald H. Letendre
James S. Edwards

THE STUDENT ACTIVITIES FUND COMMITTEE

Percy M. Roope, *Chairman*

Guy H. Burnham, *Treasurer*
George E. Hargest

Standing Committees of the Graduate Board

The President of the University is, *ex officio,* a member of all committees of the Graduate Board.

THE COMMITTEE ON CREDENTIALS

The committee passes upon applications for admission to the graduate division and makes recommendations to the Graduate Board in respect to fellowships and scholarships and candidacy for graduate degrees.

Samuel Van Valkenburg, *Chairman*

Jesse L. Bullock
Vernon Jones
James A. Maxwell
Heinz Werner

Dwight E. Lee, *Secretary*

THE COMMITTEE ON PROFICIENCY IN FOREIGN LANGUAGES

The committee examines candidates for the degree of Doctor of Philosophy for proficiency in foreign languages.

Karl J. Arndt, Professor of German
J. Richard Reid, Associate Professor of Romance Languages
A representative of the student's major department

Standing Committees of the College Board

The President of the University and the Chairman of the College Board are, *ex officio,* members of all committees of the College Board.

THE COMMITTEE ON ADMISSIONS

Henry C. Borger, Jr.
Sherman S. Hayden
George H. Merriam
David Potter
Percy M. Roope

THE COMMITTEE ON ATHLETICS

David Potter, *Chairman*

M. Hazel Hughes
James A. Maxwell
Rocheleau Z. Granger, Jr.
Henry J. Warman

COMMITTEE ON SCHOLARSHIPS

Charles T. Bumer, *Chairman*

John L. Bradley
David Potter

Faculty

Listed in order of academic seniority within each rank

Howard Bonar Jefferson, Ph.D., LL.D., L.H.D. 160 Woodland St.
President and Professor of Philosophy since 1946.
A.B., Denison University, 1923; Ph.D., Yale University, 1929; LL.D., Denison University, 1948, Hillsdale College, 1952; L.H.D., Colgate University, 1951.

Homer Payson Little, Ph.D., LL.D. 36 Whitman Rd.
Dean of the College and Professor of Geology, Emeritus.
A.B., Williams College, 1906; Ph.D., Johns Hopkins University, 1910.

EMERITI

Benjamin Shores Merigold, Ph.D., Sc.D. 21 Maywood St.
Professor of Chemistry, Emeritus.

Haven Darling Brackett, Ph.D. 138 Elm St.
Professor of Greek and Latin, Emeritus.

Leroy Allston Ames, M.A. Spencer, Mass.
Professor of English Literature, Emeritus.

Carey Eyster Melville, A.B. 33 Vincent Ave.
Professor of Mathematics, Emeritus.

Loring Holmes Dodd, Ph.D., L.H.D. 88 Sagamore Rd.
Professor of English and Art, Emeritus.

Samuel J. Brandenburg, Ph.D. 9 Willard Ave.
Professor of Economics and Sociology, Emeritus.

PROFESSORS

Jesse Lunt Bullock, Ph.D. 35 Downing St.
Professor of Chemistry and Director of the Chemical Laboratories.
A.B., Harvard University, 1914; M.A., 1928; Ph.D., 1932. Assistant Professor, 1926-32; Associate Professor, 1932-37; Professor since 1937 (February).

James Ackley Maxwell, Ph.D. 15 Sunnyhill Dr.
Professor of Economics.
A.B., Dalhousie University, 1921; M.A., Harvard University, 1923; Ph.D., 1927. Instructor, 1924-26; Assistant Professor, 1926-28; Associate Professor, 1928-37; Professor since 1937 (February).

Samuel Van Valkenburg, Ph.D. 11 South Flagg St.
Professor of Geography. Director of the Graduate School of Geography.
Ph.D., University of Zürich, 1918. Special Lecturer in Geography, second semester, 1926-27; Assistant Professor, 1927-29; Associate Professor, 1932-37; Professor since 1937 (February).

ROBERT STANLEY ILLINGWORTH, M.A., ED.M. Pleasant St., Barre

Professor of Speech and Drama.

A.B., Clark University, 1917; M.A., Lafayette College, 1926; Ed.M., Harvard University, 1933; B.D., Andover Theological School, 1945. Associate Professor of English, 1931-38; Professor since 1938 (February). Director of the Summer School, 1935-41.

VERNON JONES, PH.D. 267 Salisbury St.

Professor of Educational Psychology.

A.B., and M.A., University of Virginia, 1920; M.A., Columbia University, 1924; Ph.D., 1926. Associate Professor, 1926-38; Professor since 1938 (February).

HENRY DONALDSON JORDAN, PH.D. 171 Woodland St.

Professor of English History and Chairman of the College Board.

A.B., Harvard University, 1918; M.A., 1922; Ph.D., 1925. Associate Professor, 1931-38; Professor since 1938 (February).

DWIGHT ERWIN LEE, PH.D. 3 Woodman Rd.

Professor of Modern European History and Secretary of the Graduate Board.

A.B., University of Rochester, 1921; M.A., 1922; Ph.D., Harvard University, 1928 (February). Assistant Professor, 1927-30; Associate Professor, 1930-38; Professor since 1938 (February).

DAVID POTTER, PH.D. 113 South St. Auburn, Mass.

Professor of Biology.

B.Sc., Massachusetts Agricultural College, 1916; M.Sc., 1923; Ph.D., Harvard University, 1932. Instructor, 1924-27; Assistant Professor, 1927-33; Associate Professor, 1933-38; Professor since 1938 (February).

PERCY MARTIN ROOPE, PH.D. 2 Lovell Drive

Professor of Physics.

A.B., Clark University, 1920; M.A., 1924; Ph.D., 1927. Instructor, 1921-27; Assistant Professor, 1927-31; Associate Professor, 1931-43; Professor since 1943.

*RAYMOND EDWARD MURPHY, PH.D.

Westminster Rd., Princeton, Mass.

Professor of Economic Geography since 1946.

B.S., Missouri School of Mines and Metallurgy, 1923; M.S., University of Wisconsin, 1926; Ph.D., 1930.

HEINZ WERNER, PH.D. 10 Atwater St.

Professor of Psychology since 1947.

Ph.D., University of Vienna, 1915. G. Stanley Hall Professor of Genetic Psychology, April, 1949.

CHARLES THEODORE BUMER, PH.D. 121 Richmond Ave.

Professor of Mathematics since 1948.

B.Sc., Denison University, 1919; M.A., Harvard University, 1922; Ph.D., Ohio State University, 1931.

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*Absent on leave, first semester, 1954-55.

KARL J. ARNDT, PH.D. 5 Hazelwood Road
Professor of German since 1950.
M.A., Washington University, 1928; Ph.D., The Johns Hopkins University, 1933.

RICHARD JEWETT LOUGEE, PH.D. 24 Maywood St.
Professor of Physiography.
B.S., Dartmouth College, 1927; M.A., University of Michigan, 1929; Ph.D., Columbia University, 1938. Associate Professor, 1947-1950 (January); Professor since 1950.

***ARTHUR EARL MARTELL, PH.D.** Maynard St., Northboro
Professor of Chemistry.
B.S., Worcester Polytechnic Institute, 1938; Ph.D., New York University, 1941. Assistant Professor, 1942-46; Associate Professor, 1946-51; Professor since 1951.

JOSEPH WEINREB, M.D. 21 Catherine St.
Professor (Affiliate) of Psychology since 1947.
A.B., Vanderbilt University, 1931; M.D., 1935.

ASSOCIATE PROFESSORS

RUDOLPH FINK NUNNEMACHER, PH.D.
Putnam Hill Rd., Sutton, Mass.
Associate Professor of Biology. Director of the Summer School.
B.S., Kenyon College, 1934; M.A., Harvard University, 1935; Ph.D., 1938. Assistant Professor, 1939-44; Associate Professor since 1944 (February).

***JOHN ELDERKIN BELL, ED.D.** Putnam Rd., Holden, Mass.
Associate Professor of Psychology since 1944.
A.B., University of British Columbia, 1933; M.A., Columbia University, 1941; Ed.D., 1942.

FREDERICK W. KILLIAN, LL.B. 3A Clement St.
Associate Professor of Sociology since 1947.
LL.B., New York University, 1925; A.B., 1934.

GEORGE EDWARD HARGEST, M.B.A. 209 Lovell St.
Associate Professor of Economics and Business Administration.
B.S., Temple University, 1933; M.Ed., 1937; M.B.A., Boston University, 1947. Assistant Professor, 1942-48; Associate Professor since 1948.

THEODORE NICOL, PH.D. 10 Circuit Ave.
Associate Professor of Romance Languages.
A.B., Clark University, 1926; M.A., Harvard University, 1928; Ph.D. 1933. Visiting Professor, 1946-48; Associate Professor since 1948.

J. RICHARD REID, PH.D. Stafford St., Rochdale, Mass.
Associate Professor of Romance Languages.
A.B., Swarthmore College, 1935; M.A., Harvard University, 1936; Ph.D., 1943. Assistant Professor, 1944-48; Associate Professor since 1948.

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*Absent on leave, 1954-55.

Seymour Wapner, Ph.D. 26 Prouty Lane

Associate Professor of Psychology since 1948.

A.B., New York University, 1939; M.A., University of Michigan, 1940; Ph.D., 1943.

Henry John Warman, Ph.D. 193 Lovell St.

Associate Professor of Geography.

B.S. in Ed., Bloomsburg, Pa., State Teacher's College, 1932; Ed.M., Temple University, 1938; Ph.D., Clark University, 1945. Assistant Professor, 1943-44; 1945-48; Associate Professor since 1948.

Karl Oscar Emanuel Anderson, Ph.D.
5 Brentwood Dr., Holden, Mass.

Associate Professor of English.

A.B., Harvard University, 1927; M.A., 1928; Ph.D., 1942. Assistant Professor, 1945-49; Associate Professor since 1949.

Roy Chalmers Gunter, Ph.D. Dodge, Mass.

Associate Professor of Physics.

B.S., Bowdoin College, 1938; M.A., Boston University, 1939; Ph.D., 1942. Instructor in Physics and Mathematics, 1941 (February) - 1943; Assistant Professor of Physics, 1943-49; Associate Professor since 1949.

Sherman Strong Hayden, Ph.D. 68 Moore Ave.

Associate Professor of International Relations.

A.B., Harvard University, 1930; LL.B., 1933; M.A., Columbia University, 1936; Ph.D., 1942. Assistant Professor, 1946-49; Associate Professor since 1949.

Frederick Eugene Melder, Ph.D. 173 Woodland St.

Associate Professor of Economics.

B.B.A., University of Washington, 1926; M.A., 1931; Ph.D., University of Wisconsin, 1936. Assistant Professor, 1937-42; Associate Professor, 1942-46 and since 1950.

Edward Counselman Higbee, Ph.D. 78 Highland St., Holden, Mass.

Associate Professor of Geography since 1950 (February).

A.B., University of Wisconsin, 1932; M.A., 1938; Ph.D., Johns Hopkins University, 1949.

Robert Francis Campbell, Ph.D. 209 Lovell St.

Associate Professor of American History.

A.B., Yale University, 1939; M.A., Columbia University, 1940; Ph.D., 1947. Assistant Professor, 1946-50, Associate Professor since 1950.

Gerson Kegeles, Ph.D. 52 Zenith Drive

Associate Professor of Chemistry since 1951.

B.S., Yale University, 1937; Ph.D., 1940.

Claude W. Barlow, Ph.D. 2 Oak St.

Associate Professor of Classics.

A.B., Amherst College, 1928; M.A., Indiana University, 1930; Ph.D., Yale University, 1935. Assistant Professor, 1947-52; Associate Professor since 1952.

Leslie Phillips, Ph.D. 19 Florida Ave.

Associate Professor (Affiliate) in Clinical Psychology.

M.A., University of Chicago, 1944; Ph.D., 1949; Instructor (Affiliate) 1946-49 ~~50~~; Assistant Professor (Affiliate) ~~1950~~ 1949-50; Associate Professor (Affiliate) since 1950.

Tamara Dembo, Ph.D. 20 Loudon St.

Associate Professor of Psychology since February, 1953.

Ph.D., University of Berlin, 1930.

Richard S. Lazarus, Ph.D. 15 Fairlawn Road

Associate Professor of Psychology since 1953.

A.B., College of the City of New York, 1942; M.S., University of Pittsburgh, 1948; Ph.D., 1948.

Morris H. Cohen, Ph.D. 989 Main St.

Associate Professor of Government.

A.B., University of Chicago, 1939; Ph.D., 1950. Assistant Professor, 1947-53; Associate Professor since 1953.

John Sunapee Stubbe, Ph.D. 101 South Flagg St.

Associate Professor of Mathematics.

B.S., University of New Hampshire, 1941; M.S., Brown University, 1942; Ph.D., University of Cincinnati, 1945; Assistant Professor, 1949-53; Associate Professor since 1953.

Tilton M. Barron, B.L.S. 120 Amherst St.

Librarian since 1954.

B.A., Colorado College, 1937; B.L.S., Columbia University School of Library Service, 1940.

Gordon T. Gwinn, Ph.D. 26 Charlotte St.

Associate Professor of Psychology.

A.B., University of Arizona, 1942; Ph.D., Yale University, 1948. Assistant Professor, 1949-54; Associate Professor since 1954.

J. Fannin King, M.A.

Associate Professor of Romance Languages.

A.B., Pomona College, 1936; M.A., Harvard University, 1937. Assistant Professor, 1946-54; Associate Professor since 1954.

Henry C. Borger, Jr., Ph.D. 156 Woodland St.

Dean of Men since 1954. Associate Professor of Education.

A.B., Princeton University, 1933; M.A., Columbia University, 1938; Ph.D., 1954. Assistant Professor, 1950-54; Associate Professor since 1954.

ASSISTANT PROFESSORS

M. Hazel Hughes, M.Ed. 638 Pleasant St.

Dean of Women. Director of Physical Education for Women.

B.Ed., Clark University, 1944; M.Ed., Boston University, 1949. Associate Dean for Women, 1949-54; Dean since 1954.

JAMES S. EDWARDS, M.A. 21 Richards St.

Assistant Professor of German since 1947.

A.B., Brown University, 1936; M.A., 1938.

ROCHELEAU Z. GRANGER, JR., M.A. in ED. 113 Paxton St., Leicester, Mass.

Director of Physical Education for Men since 1949.

A.B., Clark University, 1938; M.A. in Ed., 1939.

*EUGENE J. KELLEY, M.B.A. 16 Oread St.

Assistant Professor of Economics and Business Administration since 1949. Acting Director, Division of Business Administration.

B.S., University of Connecticut, 1944; M.Ed., Boston University, 1948; M.B.A., 1949.

JOSEPH A. NORDSTROM, M.S. 59 Prospect St.

Assistant Professor of Business Administration since 1950.

B.S., Northeastern University, 1941; M.S., Massachusetts Institute of Technology, 1947.

WILLIAM H. CARTER, JR., PH.D. 18 Oread St.

Assistant Professor of English.

A.B., Middlebury College, 1936; M.A., Harvard University, 1938; Ph.D., 1951. Instructor, 1949-51; Assistant Professor since 1951.

DANIEL GORENSTEIN, PH.D. 71 Oldham Rd., West Newton, Mass.

Assistant Professor of Mathematics since 1951.

A.B., Harvard University, 1943; Ph.D., 1950.

ROBERT N. BECK, PH.D. 24 Mayflower Rd., Leicester, Mass.

Assistant Professor of Philosophy.

A.B., Clark University, 1947; M.A., Boston University, 1948; Ph.D., 1950. Instructor, 1948-52; Assistant Professor since 1952.

DONALD HENRY LETENDRE, M.A. in ED. 17 Oberlin St.

Assistant Professor of English.

A.B., Clark University, 1938; M.A., in Ed., 1939. Instructor, 1946-52; Assistant Professor since 1952.

MARC RAEFF, PH.D. 989 Main St.

Assistant Professor of Russian History and Language.

M.A., Harvard University, 1947; Ph.D., 1950. Instructor, 1949-52; Assistant Professor since 1952.

JOHN LEWIS BRADLEY, PH.D. 64 Cedar St.

Assistant Professor of English since 1953.

A.B., Yale University, 1940; M.A., Harvard University, 1946; Ph.D., Yale University, 1950.

THOMAS TAMOTSU SUGIHARA, PH.D. 51 Hitchcock Rd.

Assistant Professor of Chemistry since 1953.

A.B., Kalamazoo College, 1945; S.M., University of Chicago, 1951; Ph.D., 1952.

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*Absent on leave, 1954-55.

DIETER BRUNNSCHWEILER, PH.D. 7 Hawthorne St.
Assistant Professor of Geography, and Geology, 1954-55.
A.B., University of Zurich, 1945; M.A., 1949; Ph.D., 1952.

JAMES M. HUND, PH.D. Goodale St., West Boylston
Assistant Professor of Economics since 1954.
A.B., Amherst College, 1943; M.A., Princeton University, 1952; Ph.D., 1954.

ROGER C. VAN TASSEL, M.A. 31 Huntington Avenue
Assistant Professor of Economics since 1954.
A.B., Union College, 1947; M.A., Cornell University, 1950.

I. ALDEN MACCHI, PH.D. 54 Wachusett Street
Assistant Professor of Physiology since 1954.
A.B., Clark University, 1947; M.A., 1950; Ph.D., Boston University, 1954.

ROBERT W. BAKER, PH.D. 21 Pocasset Avenue
Assistant Professor of Psychology, 1954-55.
A.B., Hobart College, 1947; Ph.D., Clark University, 1953.

JAMES M. COFFEE, M.A. 97 Vassar Street
Assistant Professor of Education since 1954, and Director of Placement.
A.B., Duke University, 1949; M.A., Cornell University, 1950.

CHARLES J. COLLAZZO, JR., M.C.S. 2360 Massachusetts Ave.
Lexington, Mass.
Assistant Professor of Business Administration, 1954-55.
B.A., Northeastern University, 1943; M.C.S., Boston University, 1948.

THEODORE LEVENTHAL, PH.D. 827 Pleasant St.
Assistant Professor (Affiliate) of Psychology, 1954-55.
B.A., Brooklyn College, 1948; Ph.D., University of Kansas, 1953.

INSTRUCTORS

GUY HARVEY BURNHAM, M.A. 19 Woodman Rd.
Instructor in Geography since 1946. Cartographer, Graduate School of Geography since 1922.
A.B., Clark University, 1916; M.A., 1922.

SAMUEL P. COWARDIN, III, M.A. 14 Oberlin St.
Instructor in Fine Arts since 1949.
A.B., Harvard University, 1943; M.A., 1948.

RAYMOND E. BARBERA, DOCTOR EN LETRAS 23 Shirley St.
Instructor in Romance Languages since 1953.
A.B., Brooklyn College, 1947; M.A., University of Arizona, 1948, Doctor en Letras, Universidad Nacional de Mexico, 1949.

RELLY RAFFMAN, M.A. 45 Boyd St., Cherry Valley
Instructor in Music since 1954.
B.A., Dartmouth College, 1943; M.A., Columbia University Teachers College, 1949.

STANLEY CHABEREK, JR., PH.D. 16 West End Ave., Westboro
Instructor in Chemistry, 1954-55.
A.B., Clark University, 1947; M.A., 1948; Ph.D., 1949.

PETER J. DREVINSKY, M.S. 34 Gates St.
Instructor in Chemistry, 1954-55.
B.S., University of Massachusetts, 1950; M.S., Massachusetts Institute of Technology, 1951.

CLARA BRAHM, PH.D. 426 Lovell St.
Instructor in Russian Language, 1954-55.
Ph.D., University of Heidelberg, 1926.

LECTURERS

PHILIP H. BREEN, LL.B. 151 Barnard Rd.
Lecturer in Business Law since 1947 (January).
A.B., The College of the Holy Cross, 1920; LL.B., Boston University, 1923.

BERNARD KAPLAN, PH.D. 25 Pocasset Ave.
Lecturer in Psychology, 1954-55.
A.B., Brooklyn College, 1948; M.A., Clark University, 1950; Ph.D., 1953.

JOHN LANE, PH.D. 305 Belmont St.
Lecturer in Psychology, 1954-55.
B.S., University of Massachusetts, 1949; M.A., Clark University, 1951; Ph.D., 1954.

ANTHONY VARJABEDIAN, M.D. 76 Elm St.
Lecturer in Psychology, second semester, 1954-55.
A.B., Clark University, 1941; M.D., Yale University, 1944.

M. EVELYN HARRIMAN, M.A. in ED. 39 Courtland St.
Lecturer in Education, first semester, 1954-55.
B.S. in Ed., Boston University, 1948; M.A. in Ed., 1950.

THERESA F. KAVANAUGH, M.A. in ED. 402 Oxford St., Auburn, Mass.
Lecturer in Education, first semester, 1954-55.
B.Ed., Rhode Island College of Education, 1946; M.A. in Ed., Boston University, 1953.

HALL BARTLETT, M.A. New York, N. Y.
Lecturer in Education, first semester, 1954-55.
B.S., Trinity College, 1926; M.A., Columbia University, 1932.

DAYTON D. SHEPHERD, M.A. Durham, Conn.
Lecturer in Education, second semester, 1954-55.
B.S., Southwest Missouri State College, 1946; M.A., Yale University, 1950.

ERWIN RAISZ, PH.D. Cambridge, Mass.
Visiting Lecturer in Geography, 1954-55.
Diploma, Royal Polytechnicum, Budapest, 1914; M.A., 1924; Ph.D., Columbia University, 1929.

BURTON N. GATES, PH.D. 24 Charlotte St.
Research Assistant in Biology since 1954.
A.B., Clark University, 1905; A.M., 1906; Ph.D., 1909.

ASSISTANTS IN PHYSICAL EDUCATION

Festus G. Amsden 6 Downing St.
Assistant Director of Physical Education for Men since 1954.
A.B., Clark University, 1951.

Frances Cockrell, B.S. in Ed. 7 Hawthorne St.
Assistant Director of Physical Education for Women since 1951.
B.S. in Ed., Bouvé-Boston School, 1949.

Special Graduate School Appointments

TEACHING FELLOWS

Peter E. Comalli, Jr. Psychology
A.B., Clark University, 1949.

Criton S. Inglessis Chemistry
A.B., Colgate University, 1953.

Winthrop D. Jordan (1st semester)
History and International Relations
A.B., Harvard University, 1953.

Richard H. McKey, Jr. History and International Relations
B.A., Ursinus College, 1951.

Vsevolod Mihajlov Chemistry
A.M., Clark University, 1954.

F. Carl Miller Economics and Sociology
A.M., University of Western Ontario, 1952.

Nicholas L. Onorato Economics and Sociology
A.M., Clark University, 1952.

William A. Osborne Economics and Sociology
A.M., Fisk University, 1953.

John R. Pavia, Jr. (2nd semester)
History and International Relations
A.B., Lehigh University, 1954.

APPOINTMENTS UNDER GRADUATE FUNDS

The Alumni Association Fund

Vsevolod Mihajlov Chemistry
A.M., Clark University, 1954.

The George S. Barton Fund

Jane F. Perry International Relations
A.B., Clark University, 1954.

Demeter T. Karaku Education
A.B., Clark University, 1954.

The Joseph F. Donnelly Memorial Fund

Amilcare Biancheria A.M., Clark University, 1954.	Chemistry
John D. Cushing, A.M., University of New Hampshire, 1950.	History
Emanuel Maier Ph.D., New York University, 1953.	Geography
Susumu Miyazaki A.B., Yokohama National University, 1954.	Economics
Thomas B. Mulholland, Jr. A.M., Clark University, 1952.	Psychology

The Austin S. Garver Fund

Margery Bodansky A.B., Swarthmore College, 1954.	Psychology
John F. Earl A.M., University of Western Ontario, 1952.	Economics
Godwin A. Odenigwe A.M., Clark University, 1954.	History
Anthony Sas A.M., University of Washington, 1951.	Geography

The Charles H. Thurber Fund

Sybil S. Speier A.B., Swarthmore College, 1954.	Psychology

Alphabetical List of Faculty and Administration

Festus G. Amsden, A.B., Assistant Director of Physical Education for Men
Karl O. E. Anderson, Ph.D., Associate Professor of English
Robert P. Anderson, M.S., Assistant to the President
Karl J. Arndt, Ph.D., Professor of German
Robert W. Baker, Ph.D., Assistant Professor of Psychology
Raymond E. Barbera, Doctor en Letras, Instructor in Romance Languages
Claude W. Barlow, Ph.D., Associate Professor of Classics
Tilton M. Barron, B.L.S., Librarian
Hall Bartlett, M.A., Lecturer in Education
Robert N. Beck, Ph.D., Assistant Professor of Philosophy
John E. Bell, Ph.D., Associate Professor of Psychology
Henry C. Borger, Jr., Ph.D., Dean of Men, Associate Professor of Education
John L. Bradley, Ph.D., Assistant Professor of English
Mrs. Clara Brahm, Ph.D., Instructor in Russian Language
Philip H. Breen, LL.B., Lecturer in Business Law
Miss Irma M. Brown, Secretary to the President
Dieter Brunnschweiler, Ph.D., Assistant Professor of Geography and Geology (not listed p.128)
Jesse L. Bullock, Ph.D., Professor of Chemistry
Charles T. Bumer, Ph.D., Professor of Mathematics
Guy H. Burnham, M.A., Instructor in Geography, Cartographer
Mrs. Thomas Calder, Housemother, Fanning House
Robert F. Campbell, Ph.D., Associate Professor of American History
William H. Carter, Jr., Ph.D., Assistant Professor of English
Stanley Chaberek, Jr., Ph.D., Instructor in Chemistry
Miss Frances Cockrell, B.S. in Ed., Assistant Director of Physical Education for Women
James M. Coffee, M.A., Director of Placement and Vocational Counselling, Assistant Professor of Education
Morris H. Cohen, Ph.D., Associate Professor of Government
Mrs. Lydia P. Colby, Registrar
Charles J. Collazzo, Jr., M.C.S., Assistant Professor in Business Administration
Richard J. Courtney, Manager, Bookstore
Samuel P. Cowardin, III, M.A., Instructor in Fine Arts
Miss Alice M. Currie, Assistant Bursar
Miss Tamara Dembo, Ph.D., Associate Professor of Psychology
Mrs. Gladys Diliberto, Secretary to the Dean and the Chairman of the College Board
Peter J. Drevinsky, M.S., Instructor in Chemistry
James S. Edwards, M.A., Assistant Professor of German
Miss Jewel Ann Emory, A.B., Director of the News Bureau
Michael B. Fox, M.D., Medical Director
Burton N. Gates, Ph.D., Research Assistant in Biology
Daniel Gorenstein, Ph.D., Assistant Professor of Mathematics
Rocheleau Z. Granger, Jr., M.A. in Ed., Director of Physical Education for Men
Roy C. Gunter, Ph.D., Associate Professor of Physics
Gordon T. Gwinn, Ph.D., Associate Professor of Psychology
George E. Hargest, M.B.A., Associate Professor of Economics and Business Administration
Mrs. M. Evelyn Harriman, M.A. in Ed., Lecturer in Education
Sherman S. Hayden, Ph.D., Associate Professor of International Relations
Mrs. John Healey, Housemother, Woodland House
Miss Marion Henderson, B.S., Reference Librarian
Edward C. Higbee, Ph.D., Associate Professor of Geography
Mrs. Mary A. Hubbard, Bursar

Miss M. Hazel Hughes, M.Ed., Dean of Women and Director of Physical Education for Women
James M. Hund, Ph.D., Assistant Professor of Economics
Robert M. Hyde, M.A., Director of the Evening College
Robert S. Illingworth, M.Ed., Professor of Speech and Drama
Howard B. Jefferson, Ph.D., President
Vernon Jones, Ph.D., Professor of Educational Psychology
H. Donaldson Jordan, Ph.D., Professor of English History and Chairman of the College Board
Bernard Kaplan, Ph.D., Lecturer in Psychology
Miss Theresa F. Kavanaugh, M.Ed., Lecturer in Education
Gerson Kegeles, Ph.D., Associate Professor of Chemistry
Eugene J. Kelley, M.B.A., Assistant Professor of Economics and Business Administration and Acting Director of the Division of Business Administration
Frederick W. Killian, LL.B., Associate Professor of Sociology
J. Fannin King, M.A., Associate Professor of Romance Languages
John Lane, Ph.D., Lecturer in Psychology
Richard S. Lazarus, Ph.D., Associate Professor of Psychology
Dwight E. Lee, Ph.D., Professor of Modern European History and Secretary of the Graduate Board
Donald H. Letendre, M.A. in Ed., Assistant Professor of English
Theodore Leventhal, Ph.D., Assistant Professor (Affiliate) of Psychology
Richard J. Lougee, Ph.D., Professor of Physiography
I. Alden Macchi, Ph.D., Assistant Professor of Physiology
Arthur E. Martell, Ph.D., Professor of Chemistry
James A. Maxwell, Ph.D., Professor of Economics
F. Eugene Melder, Ph.D., Associate Professor of Economics
George H. Merriam, M.A., Director of Admissions
Raymond E. Murphy, Ph.D., Professor of Economic Geography
Mrs. Winifred Nagle, R.N., Nurse
John Nazzaro, M.S., Proctor, Estabrook Hall
Theodore Nicol, Ph.D., Associate Professor of Romance Languages
Joseph A. Nordstrom, M.S., Assistant Professor of Business Administration
Rudolph F. Nunnemacher, Ph.D., Associate Professor of Biology and Director of the Summer School
Leslie Philips, Ph.D., Associate Professor (Affiliate) in Clinical Psychology
Mrs. Hervey Plenge, Housemother, Blakeslee House
David Potter, Ph.D., Professor of Biology
Mrs. Clara Provo, Housemother, New Dormitory
Marc Raeff, Ph.D., Assistant Professor of Russian History and Language
Relly Raffman, M.A., Instructor in Music
Erwin Raisz, Ph.D., Visiting Lecturer in Geography
J. Richard Reid, Ph.D., Associate Professor of Romance Languages
Percy M. Roope, Ph.D., Professor of Physics
Patrick V. Sheehan, Assistant Treasurer
Dayton D. Shepherd, M.A., Lecturer in Education
Henry L. Signor, A.B., Alumni Secretary
John S. Stubbe, Ph.D., Associate Professor of Mathematics
Thomas T. Sugihara, Ph.D., Assistant Professor of Chemistry
Roger C. Van Tassel, M.A., Assistant Professor of Economics
Samuel Van Valkenburg, Ph.D., Professor of Geography and Director of the Graduate School of Geography
Anthony Varjabedian, M.D., Lecturer in Psychology
Seymour Wapner, Ph.D., Associate Professor of Psychology
Henry J. Warman, Ph.D., Associate Professor of Geography
Joseph Weinreb, M.D., Professor (Affiliate) of Psychology
Heinz Werner, Ph.D., Professor of Psychology
Milton H. Yudell, M.D., Medical Director

Directory of Students, 1954-55

Names of students are grouped in four lists:

I (1) — graduate students, undergraduate students and special students in attendance during the regular academic year 1954-55;
I (2) — those who were in attendance in the second semester only;
I (3) — those who were in attendance less than one semester;
II — those who attended the 1954 Summer School.

Explanation of letters and symbols:

S — Scholar (graduate)
F — Fellow (graduate)
55, 56, 57, 58 — undergraduates
g — students formally admitted to the graduate school
s — special students
B — biology
BA — business administration
Ch — chemistry
Ec — economics and sociology
Ed — education
En — English
FA — fine arts
Ger — German
G — geography
H —history, government, and international relations
M — mathematics
Ph — physics
Phil — philosophy
Ps — psychology
RL — romance languages
V — veteran (preceding classification)
* — student in residence during the first semester only

State omitted—Massachusetts; town omitted—Worcester; street names refer to streets unless otherwise indicated.

I (1). GRADUATE STUDENTS, COLLEGE STUDENTS AND SPECIAL STUDENTS IN ATTENDANCE DURING THE REGULAR ACADEMIC YEAR

Name	*Classification*	*Home Address*	*Local Address*
Abraham, William John	V 57		14 Acton
*Adamski, William Francis	En s		18 Acton
Adamsky, Cathryn Ann	55	*Auburn*	
Adamson, Thelma Elaine	57	*Flushing, N. Y.*	Woodland House
Agabian, Merritt	V 55	*Oxford*	
Ahmadjian, Vernon	V B S	*Whitinsville*	
Al-Ani, Khattab Saggar	G g	*Baghdad, Iraq*	21 Richards
Al-Khashab, Wafiq Hussain	G g	*Baghdad, Iraq*	11 Charlotte
Allard, William Cheney	57		44 Volkmar Rd.
Allen, James William	58	*Brookfield*	Estabrook Hall
Allmon, Cecil Iris	56		217 May
Allstrom, June Margaret	56	*Auburn*	
Al-Maiyah, Ali Mohammed	G g	*Basrah, Iraq*	25 Freeland

Name	*Classification*	*Home Address*	*Local Address*
Almasian, Anthony Harry	V 56	*Massena, N. Y.*	22 Lakeside Ave.
Al-Shalash, Ali Hussain	G g	*Baghdad, Iraq*	180 Woodland
Anderson, Richard Langdon	58	*Willsboro, N. Y.*	Estabrook Hall
Anton, Thomas Julius	56		84 Providence
Arendes, Mary Theresa	G S	*Langdon, N. D.*	24 Gates
Arons, Martin	57	*Berlin, Germany*	145 Woodland
Ashley, Richard Earl	55	*Waterbury, Vt.*	17 Hollywood
Atkinson, Philip Weston	V 56	*Fitchburg*	
Aulson, William Neil	V 57	*Lynn*	9 Hawthorne
*Ayada, Shusaku	Ec S	*Takamatsu, Japan*	32 Richards
Ayotte, Lionel Arthur, Jr.	55	*South Portland, Me.*	9 Stoneland Rd.
*Babigian, Arthur Anthony	V 57		7 Hudson
Bailey, Elaine Gertrude	56	*St. Johnsbury, Vt.*	Hahnemann Hospital
Bailey, George LaForest	55	*Gardiner, Me.*	35 Maywood
Baker, Joyce Ann	56	*South Yarmouth*	Woodland House
Baker, Simon	V G F		1 Englewood Ave.
Baltramaitis, Joseph John, Jr.	V 57	*Oxford*	
Bank, Stanley	55	*Bronx, N. Y.*	Estabrook Hall
Bardsley, Bruce Morgan	56	*Auburn*	
Barker, Rosalind Francine	58	*Forest Hills, N. Y.*	118 Woodland
Barse, Lawrence Paul	55	*Forest Hills, N. Y.*	36 Richards
Bartolucci, Marlene Roberta	58	*Mt. Vernon, N. Y.*	Fanning House
Basiulis, Gediminas Mike	V 57		23 Newbury
Bassios, Anastasia	56		478 Burncoat
Bates, Harold Martin	56	*Dorchester*	
*Battisti, James Mario	57	*Hudson*	
Bean, David Milton	V 56	*Danvers*	Green Trailer Park
Behrman, Joseph Stephen	58	*Great Neck, N. Y.*	Estabrook Hall
Bennett, Edwin Howe	56	*Auburn*	
Benuskavich, Daniel Joseph	V 58		86 Penn Ave.
Berman, Joseph Irvin	57	*Marlboro*	
Bernard, Joan Carol	58	*Shrewsbury*	
Berthiaume, Gerald	V 58	*Auburn*	
Biancheria, Amilcare	Ch F		145 Woodland
Bianchi, David Alden	56		25 Perkins
Bilzerian, Edward Sarkis	55		1264 Pleasant
*Binkiewicz, Longin Wladyslaw	V 55	*East Walpole*	888 Main
Blair, Richard Kent	V 55	*Southbridge*	31 May
*Blanchard, Peter	57	*Staten Island, N.Y.*	1020 Main
Bliss, Monte Maurice	Ps g	*Van Hiseville, N. J.*	4 Hartshorn Ave.
Bliumfeldas, Vidmantas Konstantinas	58		57½ Harrison
Bloomgarden, Charles Irving	57	*Laurelton, N. Y.*	145 Woodland
Bobeck, Charles Frederick	V 58	*Clinton*	
Bodansky, Margery	Ps S	*New York, N. Y.*	10 Grand
Bogage, Lewis Eugene	57		253 June

Name	*Classification*	*Home Address*	*Local Address*
Bogigian, Robert Aram	57		8 Moen
Bolten, Jerome Jerald	56	*New York, N. Y.*	40 Richards
Bondanza, Marie Ann	55	*Corona, N. Y.*	Woodland House
Borglund, Robert Emmett	V 55		14 Eckman
Bossman, Robert Stanley	V 56	*Fitchburg*	
Boucher, Russell Louis	V 55	*Sterling*	
Bouley, Gloria Ann	55	*N. Oxford*	Blakeslee House
Bracani, Donald Richard	58	*Leominster*	Estabrook Hall
Braunstein, Victoria Joyce	58		17 Bancroft
Breen, John Joseph, Jr.	V Ec g	*Providence, R. I.*	
Breslauer, Barbara Ann	Ps g	*Milwaukee, Wis.*	24 Fruit
Bresnick, Edith	57	*Manchester, N. H.*	Fanning House
Brockman, Michael David	58	*Brooklyn, N. Y.*	Estabrook Hall
Brotherton, Lynda Beth	57		108 Purchase
Broverman, Donald Monroe	V Ps S	*Pittsfield*	875 Main
Brown, Donald Frederick James	58	*Wollaston*	Estabrook Hall
Brown, Walter Mahlon	58	*Southampton*	Estabrook Hall
Brownlow, Robert Earl	V 56	*Danbury, Conn.*	37 May
Bruce, Marshall Holland	57	*Hudson*	
Bruso, Paul Richard	V Ec g	*Auburn*	
Brust, Ronald William	56		2 Ethan Allen
Bryant, Barbara	57	*Grafton*	
Buchholz, Michele Andrea	58	*Mt. Vernon, N. Y.*	Woodland House
Bunker, Kenneth Gordon	56	*Quincy*	145 Woodland
Burdulis, Bernice Mary	55		146 Sterling
*Burgoyne, Marion Barbara	57	*Clinton*	
Burke, Terence	G g	*Leicester, England*	34 Gates
Burns, Patricia Ann	55		27 Grand
Burton, Frank Stevenson	56		87 June
Butler, Mary Catherine	Ec g		7 Creswell Rd.
*Butler, Valerie Frances	Ps g		5 Westbrook Circle
Butterworth, Herbert Hartley	V 55	*Southbridge*	
Byron, Anne Elizabeth	. 58	*Templeton*	Blakeslee House
Caligaris, Conrad Peter	55		10 Silver
Callahan, Daniel Thomas	55		39 Charlotte
Caloccia, Ernest Michael	58		18 Shamrock
Calverley, Mrs. Joan Nelson	55	*Auburn*	
Caplan, Elinor Beth	56	*New Haven, Conn.*	Woodland House
Carapetian, Jean Y.	56	*Teheran, Iran*	91 Summer
Card, Bryant Walter	55		199 Pleasant
Carey, Robert Vincent	V Ed g	*Millbury*	
Carlson, Arthur Wallace, Jr.	56		17 Chatham Village Rd.
Carr, Douglas Dillaber	58	*Warren*	
Carter, Mrs. Lorna Little	56		18 Oread
Castriotta, Raymond Joseph	V Ed g	*Leominster*	16 Marble
Chamberlain, Peter Baird	57	*Westminster, Vt.*	16 Marble

Name	*Classification*	*Home Address*	*Local Address*
Chang, Se Won	58	*Chonan, Korea*	Estabrook Hall
Chapman, Sally Ann	55		134 Richmond Ave.
Chase, Robert Irving	V 56	*Hanover, Me.*	2 Hudson
Chavoor, Shirley Marie	56		17 Rob Roy Rd.
Cherry, Richard Meredith	V 56	*W. Medway*	
Chester, Anthony Joseph	V 57	*Fitchburg*	
Chin, Eugene Sheu Theung	G S		5 Fiske
Chong, Merle Kwock Hing	58	*Honolulu, Hawaii*	Fanning House
Christie, John Chris	V 57	*New York, N. Y.*	40 Richards
Christoffers, Harry John	Ch g	*Amherst*	
*Clark, John Laurence	V s	*Marlboro*	
Clinedinst, Richard Wendel Parsons	56	*Larchmont, N. Y.*	37 William
*Clough, Donald Joseph	57	*Spencer*	
Cocchiola, Ronald Charles	58	*Bridgeport, Conn.*	Estabrook Hall
Cohen, Frederick Clifford	56	*Marlboro*	
Cohen, Harris Irving	56	*Rochester, N. Y.*	989 Main
Cohen, Martin Bert	56	*New York, N. Y.*	989 Main
Cohen, Ronald Ainesworth	Ch S	*Lowell*	74 Woodland
Cohn, Linda	56	*Laurelton, N. Y.*	Fanning House
Cole, Kimyon Robert	V 58		152 Morningside Rd.
Collins, Mrs. Delores Felice	57		2 Kingsbury
Collins, George Miles	58	*Milton*	Estabrook Hall
*Collins, William Francis	V 57		205 Clark
Commo, Gwynne Ann	58	*Auburn*	
Companion, Richard Paul	56	*Auburn*	
Conant, Bryant Lee	55	*Auburn*	
Cooperman, Edward Charles	57	*Brooklyn, N. Y.*	40 Richards
Corkum, Keith Hiram, Jr.	V 55	*Paxton*	
Cosman, Henry Giles	55	*Framingham*	
Coté, Jeannette Cecile	57		6 Chatham
Cowen, Donald Wayne	55	*Providence, R. I.*	10 Charlotte
*Cox, Donald William	s	*Providence, R. I.*	
Craig, Marcia Laura	58	*Whitinsville*	
*Craven, Francis Joseph, Jr.	Ch F	*Lowell*	40 Richards
Crawford, Robert Lee	55		45 Gardner
Cronkite, Mrs. Sharon Lee	56	*Shrewsbury*	
Croog, Myra Leah	56	*New Haven, Conn.*	Fanning House
Crooks, Maureen	58	*St. Huberts, N. Y.*	81 Providence
*Crovitz, Herbert Floyd	Ps F	*Edgewood, R. I.*	130 Woodland
Crowley, Paul Walter, Jr.	V 55	*Winchendon*	939 Main
Culbert, John Everett	57		32 Lincoln
*Culver, Ronald Gerard	57	*Rensselaer, N. Y.*	31 May
Cushing, John Daniel	H F		163 Constitution Ave.
Dahlstrom, Lee Durant	56		36 Nelson Pl.
Daigle, Nobert Alvin	V 56	*Gardner*	
Daly, John William	V Ed g	*Gardner*	

Name	*Classification*	*Home Address*	*Local Address*
Dargie, Daniel, Jr.	56	*Franklin, N. H.*	16 Oread
Daspin, Michael Jerome	55	*New York, N. Y.*	36 Richards
Daughney, Henry Augustus	V 56	*Fitchburg*	
Dawson, Edmund Rushmore	55	*Buffalo, N. Y.*	22 Downing
Dawson, George Brammer	57	*Prospect Plains, N. J.*	35 Maywood
Dawson, Mrs. Sallye Silver	Ed g	*Larchmont, N. Y.*	22 Downing
DeBoer, Sidney Ernest	V 57	*Clinton*	
Dedes, Michael Stephen	V 57		4 Warden
*Deedy, Mrs. Barbara Grant	Ec s		76 Longfellow Rd.
DeGrandpre, Charles Allyson	58	*Jaffrey, N. H.*	Estabrook Hall
*Deignan, James Richard	V 56	*Arlington*	
DeLeon P., Raquel Maria	G S	*Panama, Republic of Panama*	46 Tirrell
Delle, Jeanette Roberta	58		14 Pelham
del Olmo, Ginés	56	*Merida, Venezuela*	576 Burncoat
Demers, William Joseph, Jr.	55	*Hudson, N. Y.*	37 May
DeNigris, Nicholas Emanuel	57	*New Britain, Conn.*	16 Marble
DePaul, Alice Veronica	Ed s		16 Shepard
D'Errico, Peter Michael	V 57		13 Northboro
*Dichter, Dave	G S	*Atlantic City, N. J.*	50 Woodland
Diekmann, Rolf Juergen Stefan	H S	*Springfield*	115 Illinois
Dion, Francis Bruce	56	*Leominster*	
*DiVerdi, Angelo Michael	V 56	*Shrewsbury*	
DiVerdi, John Richard	V 56		4 Plum
Djeu, Wendy	57	*Buenos Aires, Argentina*	Woodland House
Dodd, Roy James	V 56	*Southbridge*	
Donabedian, Richard Kasper	58		324 June
Donahue, Mary Ellen	58		23 Wayne
Donoian, Haig Cadmus	Ch F	*Lowell*	40 Richards
Doran, Mary Agnes	Ch g		356 Chandler
*Downer, Alden Carl	V 58	*Oakdale*	
Drapos, Alexander Evangelos	58		76 June
Drevinsky, Peter Joseph	V Ch g	*Middleboro*	34 Gates
Duffy, Robert Walter	s	*Clinton*	
Dworman, Ellis David	56	*Cherry Valley*	
Dyer, Joseph John	V 56		13 Home
Earl, John Frederick	Ec S	*London, Ontario, Can.*	831 Main
Eisenbeiser, Joseph Anthony	58	*Westfield*	Estabrook Hall
Ellison, Herbert Richard	56		54 W. Boylston Dr.
Ellowis, Carla Lynne	58	*Rockville Centre, N. Y.*	Fanning House
Emens, Peter Farnham	58	*Belmont*	Estabrook Hall
English, Paul Ward	57		16 Leon
Engstrom, Joan Alfreda ([illegible])	56		63 Upsala
Engstrom, Lincoln	56	*Auburn*	
Ephraim, Elliot Maurice	55	*Providence, R. I.*	7 Kilby
Erickson, Eleanor Sylvia	58	*Gardner*	118 Woodland
Erickson, Jean Alice	s	*West Sterling*	

Name	*Classification*	*Home Address*	*Local Address*
Erikson, Erna Marie	57		42 Eagan Ave.
Eriksson, Sylvie June	57		139 Ararat
Escolas, Richard Allen	56	*Auburn*	
Farrell, Anne Margaret	58	*Rumford, Me.*	186 Russell
Farrow, Raymond Leonard	56		26 Haynes
Feinstein, Rosaline Shirley	57	*Bridgeport, Conn.*	Blakeslee House
Feldt, Nancy Ann	55	*Auburn*	
Finn, Norman Herbert	V 57		17 Arlington
Finneran, James Henry	V 55	*Westboro*	
*Finney, Thomas William	57		2 Vaughan Ave.
Fischer, Martin Alan	58	*Brooklyn, N. Y.*	Estabrook Hall
Flint, Martin Barry	55	*Newark, N. J.*	36 Richards
*Flood, Thomas Kerry	57	*New York N. Y.*	20 Gates
Foley, Martin Joseph, Jr.	55		192 Highland
Ford, Marguerite Prentice	Ps F	*Summit, N. J.*	24 Gates
Forte, Wesley Elbert	56	*N. Brookfield*	36 Richards
Forzley, Philip	V 58		3 Cutler
Foster, Elaine Elizabeth	56		394 Burncoat
Fox, Howard Alan	B s	*Brooklyn, N. Y.*	34 Elm, Shrewsbury
Fox, Richard Douhan	V 58		18 Lakeside Ave.
Frankel, Joel Howard	57	*Brooklyn, N. Y.*	40 Richards
Franklin, Jeanne	Ps g	*Tuscaloosa, Ala.*	24 Fruit
Freed, Lawrence	57		1 Manila
Freeman, Richard Paul	56		5 Norwood
Fregans, Janet Mae	55	*Holden*	
Friedman, Cyril Robert	56	*Savannah, Ga.*	6 Charlotte
Friedman, Mrs. Sylvia Eleanor	s		389 Salisbury
Friedmann, Eric Martin	V Ed g		55 S. Lenox
*Frost, Gordon Stephen	56		1205 Main
Fuchs, Roland John	G S	*Yonkers, N. Y.*	898 Main
Galvin, Richard Francis	V 57		12 Irene
Gannon, Joan Wilder	55		28 Wayne
Gans, Paul Stephen	56	*Brooklyn, N. Y.*	7 Kilby
Garon, Diana	57	*Portland, Me.*	Blakeslee House
Gartshore, Thomas Edward	57	*Ormstown, Quebec, Can.*	Perkins School Lancaster
Gaucher, Adrian Armand, Jr.	57	*Southbridge*	Estabrook Hall
Gauld, William John, Jr.	57	*Sterling*	
Gay, George Henry, Jr.	58	*Southboro*	
Gens, Stephen Herbert	57	*Brookline*	21 Shirley
George, Charles Joseph, Jr.	V 58		297 Hamilton
George, John Louis	G S	*Danvers*	4 Hancock
Germain, Norman William	V 58		9 Marshall
Gerrol, Melvin Hugh	55		3 Bellvista Rd.
Gerrol, Robert	57		3 Bellvista Rd.
Giard, Ronald Joseph	V B s	*Spencer*	

Name	*Classification*	*Home Address*	*Local Address*
Giardiello, Michele Albert	V 56	*Roslindale*	59 Maywood
Gibbons, William Michael	57		57 Downing
Gillies, Robert Bruce	58	*Oxford*	
Gilrein, Suzann Mary	55		21 Woodland
Gladding, Judith Mae	58	*Chester, Conn.*	118 Woodland
Glennon, John Patrick	H F	*Mattapan*	10 Green, Milford
Goggin, Andrienne Landry	58	*Claremont, N. H.*	118 Woodland
Goldberg, Stephen Roger	57	*Revere*	905 Main
Goldstein, Julian Morton	55	*New York, N. Y.*	17 Oberlin
Goodfellow, Joan Margaret	G S	*Plaster Rock, N. B., Can.*	15 Gates
Goodman, Alan Stanley	V 56		50 Copperfield Rd.
Gordon, Audrey Erna	58		596 Chandler
Gordon, Bennett Samuel	58		81 Fairfax Rd.
Goss, Richard Henry	56	*Massapequa, N. Y.*	3 Job Cushing Rd., Shrewsbury
Gottlieb, Mrs. Selma Bernice	Ed g		86 Longfellow Rd.
Grandone, Roy Ferris	58	*Sutton*	
Grant, William Thomas, Jr.	58		16 Goulding
Green, Leonard Charles	58	*Newark, N. J.*	Estabrook Hall
*Greene, Waldo Robert	57	*Albany, N. Y.*	16 Marble
Greenwood, Louis Hunter	56	*Millbury*	
Greer, Philip Wight	V 55		43 Irving
Griffin, John Michael	V 56	*Waltham*	16 Oread
*Griffithe, Maurice Russell	V 58	*Long Beach, Cal.*	49 Woodland
Grigas, William Anthony	57		43 Providence
Grossman, Hedda Ruth	55	*Bronx, N. Y.*	Fanning House
Guerrin, Robert Francis	55	*Flushing, N. Y.*	14 Oberlin
Gurry, Donald Bruce	55	*New York, N. Y.*	40 Richards
Gurwitz, Mrs. Rhoda Gilda	55		19 Tahanto Rd.
Gustavson, Martin Arnold	58	*Yonkers, N. Y.*	Estabrook Hall
Guthrie, Sally Irene	55		8 Prudence
Haas, Virginia Marie	57		21 Lorenz
Hacanis, Andrew Joseph	V 58		42 Lakeside Ave.
Haddad, Herbert Hoover	V 57		2 Dartmouth
Hadjoglou, Christina Mary	57	*Webster*	
Hagglund, Richard Albert	58		71 Catherine
Hagopian, Miasnig	Ch g	*Providence, R. I.*	222 Maple Ave., Shrewsbury
Haims, Bruce	56	*New York, N. Y.*	40 Richards
Hall, Richard Ellis	56	*Brockton*	43 Woodland
Ham, Leroy Henry, Jr.	V 55		150 Beaver Brook Pkwy.
Handleman, Paul Edwin	55		10 Wamsutta Ave.
Hanf, Constance	Ps g	*New York, N. Y.*	21 Richards
Hansen, Richard Andrew	58	*Fitchburg*	
Hanson, Richard Allen	57	*Northboro*	
Harris, Robert William	V 56		74 Nelson Pl.

Name	*Classification*	*Home Address*	*Local Address*
Hartleb, Harvey Hartley	56	*Bath, Me.*	43 Woodland
Harvey, Edythe Marilyn	57	*Shrewsbury*	
Haskell, Elmer Roger	V 57		6 Hermitage Lane
*Hastings, Andrew Dewey, Jr.	V G g	*Newport, N. H.*	61 Dennison Ave., Framingham
Haupt, Carolyn Edith	57	*New Haven, Conn.*	Fanning House
Hayes, David Goodwin	57		6 Oliver
Healey, Dorothy Jane	58		73 Downing
Hedenstad, Norman Richard	s		914 Main
Heller, Betty Gail	58	*Mt. Vernon, N. Y.*	Woodland House
Henderson, Richard Knight	V 55		21 Crawford
Herman, John Bernard	55	*Millbury*	
Herman, Sidney	Ec g	*Allston*	
Heroian, Ara Paul	V 55		165 Dewey
Hersch, Charles	Ps g	*Brooklyn, N. Y.*	56 Gardner, Allston
Heyer, Paul Joseph	G S	*Rochester, N. Y.*	7 Hawthorne
Higgins, Dean Paul	58	*Webster*	
Hill, Lennard Allan	57	*Milford*	9 Hawthorne
Hill, Norman Richard	57	*E. Hampton, Conn.*	11 Hawthorne
Hoffner, Herbert Howard	55	*Arverne, N. Y.*	100 Woodland
Holden, Raymond Henry	V Ps g	*Cranston, R. I.*	
Holmes, Robert Philip	55	*Whitinsville*	6 Downing
Houghton, Anne Louise	57	*Hudson*	Woodland House
Houghton, Charles Bennett	56	*Hudson*	
Hovey, Richard John	Ch F		114 Dana Ave.
Howard, Millard Allen	58	*Palermo, Me.*	Estabrook Hall
Hubbard, Winifred Ray	56	*West Boylston*	
Hughes, Thomas Robert	V 58	*Bellingham*	4 Englewood Ave.
*Hulbert, Clifton Henry	V Ed g		105 June
*Hunt, Edward Atherton	56	*Hingham*	7 Kilby
Hunter, Gilbert James	G S	*Detroit, Mich.*	898 Main
Hurwitz, Neal Jay	56	*Putnam, Conn.*	6 Downing
Hurwitz, Theodore Herbert	V 55		21 Geneva
Hutchinson, Charles Kenneth	55	*Milford*	16 Marble
Hutchinson, William Albert	V 57		8 Beckman
Iacovone, Julio James	V 58		11 Great Brook Valley
Iarussi, Louise	55	*Framingham*	118 Woodland
Inglessis, George Criton Socrates	Ch F	*New York, N. Y.*	78A Downing
Isaacson, Stephen	56	*Brooklyn, N. Y.*	7 Kilby
Jackola, Ann Marie	56	*Oakdale*	
Jackson, Harold Christiernin, Jr.	V 58		89 Eunice Ave.
Jackson, Meredith Lee	58		54 Woodland
Jackson, Merrilee Ann	58	*Watertown, Conn.*	Fanning House
Jagolinzer, Philip	58	*Pawtucket, R. I.*	Estabrook Hall
Jarm, Charles	V 58	*New York, N. Y.*	Estabrook Hall
Jencks, Carlotta Althea	55	*Shrewsbury*	

Name	*Classification*	*Home Address*	*Local Address*
Jennings, Sandra Paula	56	*Stratford, Conn.*	Fanning House
Jennings, Stephen Lester	V 55	*Bethesda, Md.*	980 Main
Johanson, June Ingrid	57	*Wassaic, N. Y.*	Blakeslee House
Johnson, Carle Albert, Jr.	57	*Laconia, N. H.*	6 Downing
Johnson, Clarke Dana	V 58	*Athol*	Estabrook Hall
Johnson, Donald Melvern	V 58		120 Purchase
Johnson, Nancy Ann	55		447 Grove
Johnson, Richard Skerry	V 57	*Jefferson*	
*Johnson, Richard Sydney	58		4 Watson Ave.
Johnson, Warren Evan	58	*Leicester*	
Johnston, Anne Stewart	58	*Elizabeth, N. J.*	Fanning House
Johnston, David Bergen	55		20 Anderson Ave.
Jolie, Richard Norman	57	*Auburn*	
*Jones, Alfred Leroy	Ed S	*Auburn*	
Jones, George Charles	V 56		55 Constitution Ave.
Jordan, Edward John, Jr.	Ps g	*Hamden, Conn.*	8 May
*Jordan, Winthrop Donaldson	H g		171 Woodland
Jowise, Janet Helen	56	*Long Island City, N. Y.*	Woodland House
Kacandes, Pearl George	58	*Neptune, N. J.*	Blakeslee House
Kaden, Stanley Edward	Ps g		38 Merrick
Kagan, Richard Allan	57	*Chelsea*	145 Woodland
Kajander, Vivian Sylvia	57	*Gardner*	Fanning House
*Kalat, Mrs. Joan Odlin	Ec g	*Holden*	
Kane, Daniel Arthur	58	*Brooklyn, N. Y.*	Estabrook Hall
Kapanen, Mrs. Elaine Revolti	55	*Fitchburg*	
Karaku, Demeter Theodore	V Ed S		12 Winfield
Katz, Mildred	55		3 Zenith Dr.
Kay, Marjorie Alice	56		46 Leeds
Keating, John Joseph	58	*Fitchburg*	Estabrook Hall
*Kelley, Justin John	V Ed g		490 Grove
Kelly, John Joseph	V 56		31 Blossom
Kendall, Ethel Anne	58	*Norton, Vt.*	118 Woodland
Kent, Joyce Micaela	58	*Millbury*	
*Kersch, Edward Sheldon	G S	*Detroit, Mich.*	78 May
Khan, Mohammed Halim	G F	*Aligarh, India*	35 May
Kiakis, Helen	57		16 Healy Rd.
*Killian, Dale VanCampen	s		3A Clement
Killoran, Joseph Patrick	V 58		194 Tacoma
Kinell, Edwin Ellis	57		2 Longmeadow Ave.
King, Robert Fabian	55	*Holden*	
Kirkham, Katherine Paula	58	*Norwich, Vt.*	Fanning House
Kirshenbaum, Sanford Marshall	55	*Providence, R. I.*	36 Richards
Klainer, Stanley Melvin	Ch S		24 Loudon
Klein, Benjamin Zalman	56		5 Montvale Rd.
Klem, Bernard Alan	57	*Milford*	20 Gates

Name	*Classification*	*Home Address*	*Local Address*
Klinger, Lawrence Allan	58	*New York, N. Y.*	Estabrook Hall
Knight, William Walton, III	58		11 Monadnock Rd.
Komers, Inge Maria ([illegible]	57	*Brookline*	77 Amherst
Kostreba, Anthony John	V 58	*Palmer*	38 Woodland
Kottis, Anna Angela	56	*Uxbridge*	Fanning House
Koutsoubas, George William	55		10 Newton Ave.
Kraidman, Emma	Ps g	*Brooklyn, N. Y.*	4 Allen
Kronberg, George Herbert	V 56		6 Deering Dr.
Laakso, William Bruce	57	*Gardner*	35 Maywood
*LaBaire, Michael Philip	58	*Auburn*	
LaBrie, Donald Richard	55	*Auburn*	
*LaConte, Richard Donald	57		37 Alvarado Ave.
Lacoste, Roger Gerard	Ch F		25 Hollywood
Laine, Norman Raymond	55		42 Velander
Lajeunesse, Roger Lucien	V 57	*Putnam, Conn.*	9 Hawthorne
Lambert, David, Jr.	V 58	*Cliffwood Beach, N. J.*	766 Main
Lamberto, Nunzio Anthony	V 57	*Clinton*	
Lambros, Frank Harry	V Ec g	*Dudley*	
Lamm, Irwin Stuart	55	*New York, N. Y.*	100 Woodland
Lander, Ernest Mayer	56	*Caribou, Me.*	36 Richards
Lander, Robert Harvey	56	*Caribou, Me.*	36 Richards
Lane, William Irwin	58	*Brooklyn, N. Y.*	Estabrook Hall
Langille, Carolyn Margaret	58		6 Lansing Ave.
*Lapham, Brent Anderson	57	*New Haven, Conn.*	13 Gates
*Larach, Humberto	56	*Honduras, Central America*	9 Wyman
Larson, Jane Louise	B S	*Leicester*	
Lasoff, Arthur Malcolm	55	*West Newton*	36 Richards
Latino, Anna Teresa	57		8 Channing
Lavigne, Paul Taylor	V 56		20 Sherbrook Ave.
Lawrence, Ira Stephen	56	*Brooklyn, N. Y.*	36 Richards
Leal, Elizabeth Jane	58		55 Circuit Ave.
Leavitt, David Ashley	57	*Scarsdale, N. Y.*	36 Richards
Lee, Arthur Brown, Jr.	57	*Brooklyn, N. Y.*	20 Gates
Lee, Hong Kyu	56	*Seoul, Korea*	Estabrook Hall
Leger, Eugene Henry	V 56		15 Preston
Lenentine, Charlotte Maxine	H g	*Monticello, Me.*	15 Gates
Leone, Lawrence Dominic	V 56	*Newton*	
Les, Frederick Joseph	V 58	*Clinton*	
Levison, Bruce Edward	57	*Brookline*	31 Shirley
Levy, Robert Bernard	55	*Portland, Me.*	11 Pemberton
Liebert, Robert Samuel	Ps S	*Forest Hills, N. Y.*	11 Loudon
Liedes, Liisa Annikki	58	*Fitchburg*	118 Woodland
Lincoln, Ralph Patterson	56	*Barre*	40 Richards
Lindblom, Barbara Jane	56		51 N. Worcester Ave.
Lipkin, David Lawrence	57	*Brooklyn, N. Y.*	6 Charlotte
Litsky, Joan Ann	57	*Waterbury, Conn.*	Woodland House

Name	*Classification*	*Home Address*	*Local Address*
Lockhart, John	Ed g		28A King
Logue, Donna Marie	57	*Marcellus, N. Y.*	Fanning House
Lombardi, Edward Joseph	58	*Methuen*	Estabrook Hall
*Long, Henri Stanley, Jr.	V s		17 Home
Long, Ruth Stoddard	56	*Monson*	Woodland House
Longo, Nicholas Augustus	56	*Putnam, Conn.*	35 Maywood
Lopez, Manuel Dennis	V 56	*Westfield*	Estabrook Hall
Lubitski, Carl James	57	*Oakville, Conn.*	16 Marble
Lukshis, Aldona Patricia	57		1288 Main
Luna, Telesforo Wisco, Jr.	G s	*Pasuquin, Ilocos Norte, Philippines*	7 Hawthorne
Lynch, Frances Elizabeth	56	*Marlboro*	Woodland House
MacConnell, Gary	56	*Granville, N. Y.*	36 Richards
MacKinnon, Hugh Neil	58	*Southbridge*	
MacKoul, Albert Peter	58		6 Fay
Magiday, Kenneth	56	*Bronx, N. Y.*	40 Richards
Mahar, John William	55	*Braintree*	9 Wyman
*Mahoney, Francis Xavier	57		28 Clive
Maier, Emanuel	V G F		1003 Main
Maki, Roberta Elaine	58	*West Sterling*	
Makler, Herman Abraham	V 57	*Belmar, N. J.*	20 Gates
Manna, George Robert	V 56		18 Northboro
Marcus, Harold Golden	58		5 Havelock Rd.
Marcus, Marilyn	58	*Brooklyn, N. Y.*	118 Woodland
Marks, Milton Stanton	58		2 Ureco Ter.
Martin, Alice Louise	55		45 Merrick
Maso Fernandez, Maria Beatriz	G g	*Havana, Cuba*	2 Claremont Sq.
Mate, Brian	55	*Rockaway Beach, N. Y.*	36 Richards
Mathews, Constance Anne	55		50 Eunice Ave.
Matthew, David Vandlan	56	*West Berlin*	
Mattson, Barbara Ann	58		21 Esther
Matusaitis, Vida Regina	58		4 Vernon Terr.
Maxham, David Earl	V 57	*Worcester, Vt.*	16 Marble
Maxwell, Bruce Alber	V 56	*Berlin*	
Mayer, Joseph	Ps F	*Brookline*	423 Chandler
Mays, Lois Ann	58		38 Elliott
McAuliffe, Gaynell Ruth	56	*Pequonock, Conn.*	Woodland House
McCarron, Paul John	Ed S		64 Locust Ave.
*McCourt, James Carson	Ps s		66 Greenhill Pkwy.
*McDonagh, Paul Mathew	Ch g	*Lowell*	74 Woodland
*McGranaghan, William Joseph	V 55	*Northboro*	
McGurren, Jane Ann	58		2 Germain
McKey, Richard Haskayne, Jr.	V H S	*Wonalancet, N. H.*	54 Downing
McQuaid, Robert Allen	56		10 Oliver
Meadows, David Lee	57		55 Catherine
Melvin, Paul Alan	56		216 W. Mountain

Name	*Classification*	*Home Address*	*Local Address*
Merzigian, John	V 57		182 Chino Ave.
Mess, Irwin Howard	57		94 Houghton
Michalski, Jan Kasimir	55		15 Vernon
Michelsen, Elizabeth Marit	58	*Woodmere, L. I., N. Y.*	Fanning House
Micuta, Jurate Emily	57		159 Vernon
Mihajlov, Vsevolod	Ch F		13 Oak Ave.
*Miles, Donna Ann	56	*Holden*	
Miller, Arnold	Ps g		131 Uncatena Ave.
Miller, Frederick Carl	Ec F	*London, Ontario, Can.*	Fairlawn Circle, Shrewsbury
Miller, Stuart Robert	58	*Brooklyn, N. Y.*	Estabrook Hall
Mishler, Audrey	Ps g	*Long Island City, N. Y.*	46 Garden, Boston
Miyazaki, Susumu	Ec S	*Kanagawa, Japan*	11 Charlotte
Mogil, Rena	56	*Brooklyn, N. Y.*	118 Woodland
Moniz, James	V 56	*Auburn*	
Moossa, Walter Francis	58	*Holden*	
Mooshagian, Madieros	Ed g		16 Bluff
*Moran, Raymond Kenneth	s		1301 Main
Moreau, Claudette Therese	58	*Pawtucket, R. I.*	Woodland House
*Morgan, Mary Byrne	56		32 Hadwen Lane
Morin, Edward Marshall	57		48 Midland
Morin, Mrs. Gertrude G.	s		32 Maplewood Rd.
Morin, Marilyn Natalie	56		32 Maplewood Rd.
Morin, Wilfred William, Jr.	58	*Millbury*	
Morrison, Donald Lyman	57	*West Millbury*	
Mulholland, Thomas Basil, Jr.	V Ps F	*Lunenburg*	
Multer, Raymond Bertram	56	*Far Rockaway, N. Y.*	40 Richards
Murdock, Arthur Chandler	B g		2 Fern
*Murphy, Evelyn Anne	Ch s		79 Indian Hill Rd.
Murphy, Richard Ernest	G F	*Wheaton, Md.*	4 Downing
*Mysliwiec, Jane Frances	56		64 Dorchester
*Nader, Michael Anthony	56		392 Shrewsbury
Nakayama, Eisuke	Ec S	*Ashiya-City, Japan*	7 Kilby
Nathan, Joseph	56	*Far Rockaway, N. Y.*	100 Woodland
Nazemi, Soltan Said	56	*Teheran, Iran*	35 Maywood
Nazzaro, John	V H g	*Medford*	Estabrook Hall
Nelson, Joyce Marie	58		87 Fairfax Rd.
Newell, Alan Hobart	B g		218 West
Nichols, John Francis II	57	*W. Hartford, Conn.*	145 Woodland
Nickel, Herbert Joseph	Ps S	*Baltimore, Md.*	24 Fruit
Noponen, Francis William	V 55		11 Freedom Way
Norcross, Carol Evelyn	56	*Poughkeepsie, N. Y.*	Blakeslee House
*Nordwell, Clifford Irving	55	*Shrewsbury*	
Noumoff, Samuel Joseph	56	*Brooklyn, N. Y.*	7 Kilby
Nugent, Gerald Francis	V 58		37 Vineyard

Name	*Classification*	*Home Address*	*Local Address*
*Nylin, Marilyn Bernadine	Ed g		119 Airlie
Odenigwe, Godwin Anibeze	H F	*Nigeria, West Africa*	50 Woodland
Oickle, George Bradford	57		26 Heroult Rd.
Olson, Donald Hillier	56		2 Chalmers Rd.
Olson, Marjorie Louise	55		85 Downing
Olund, Robert Nils	58	*Auburn*	
O'Malley, Ann Elizabeth	Ec s	*Springfield*	145 Woodland
Onorato, Nicholas Louis	Ec F		35 King
*Oram, George Henry, Jr.	V 56	*Marlboro*	16 Marble
Osborne, William Adolphus	Ec F	*Georgetown, British Guiana*	4 Newport
Oswell, David Dill	V 56		370 Lovell
*O'Toole, Robert Edwin	58	*Utica, N. Y.*	Estabrook Hall
O'Toole, William Francis	58		73 Wyola Dr.
Paik, San Ok	56	*Seoul, Korea*	Woodland House
Pallas, Chris George	55		58 Andover
Palmer, Judith Ann	57		20 Brookman
*Palmer, Mrs. Margaret Echols	s		8 Westwood Dr.
Paltrineri, Paul, Jr.	56	*Wellesley Hills*	16 Oread
Panagiotopoulos, Anne Demetrios	56	*Pyrgos, Elias, Greece*	87 Commodore Rd.
Parmenter, Franklin David	57	*Orange*	17 Crystal
Patracone, Louis Domenic	V 56	*South Barre*	
Paulson, David Carl	V Ed g	*Pepperell*	
Pavia, John Richard, Jr.	H g	*East Orange, N. J.*	115 Illinois
Pawlina, Frank Edwin	V 56	*Woonsocket, R. I.*	
Perkins, Phyllis Ann	58	*Boston*	118 Woodland
Perry, Jane Frances	H S		154 Lovell
Peterson, Lee Kent	58		5 Reeves
*Peterson, Ruth Carolyn	56		158 Vernon
Petrides, Mrs. Victoria Manos	56		46 May
Petridis, Adrianne Elizabeth	57	*Hyannis*	Fanning House
*Philip, Philip Louis	V 57		13 Scott
Pinchak, Joan Ruth	57	*Paterson, N. J.*	Fanning House
Pitt, John Ronald	57		54 Catherine
Plakstis, Peter John, Jr.	V 55		58 Great Brook Valley Ave.
*Platt, Stephen Jay	57	*New York, N. Y.*	7 Kilby
Podell, Mrs. Harriett Amster	Ps F	*Philadelphia, Pa.*	34 Lakeside Ave.
Podell, Jerome Edward	V Ps F	*Philadelphia, Pa.*	34 Lakeside Ave.
Polhemus, Ellen Anne	58	*Belvidere, N. J.*	Fanning House
Pollinger, Elaine	56	*Brooklyn, N. Y.*	Blakeslee House
Pond, David Shepardson	56	*Auburn*	
Porter, Gerald Donald	V 57		455 Park Ave.
Potter-Bernier, Elaine Isabel	55	*New Bedford*	Blakeslee House
*Poutney, Jacklyn	58	*Shrewsbury*	
Power, Patricia Rose	57		114 Brookline
*Pratt, Allen Currier	V Ed g	*Greenfield*	

Name	*Classification*	*Home Address*	*Local Address*
*Pratt, William Bertram	G S	*Rochester, N. Y.*	11 Charlotte
Prensner, Richard William	55		43 Forest
Price, Malcolm Ivan	57	*Clinton*	1020 Main
Primeau, Elaine Isabelle	56	*Fitchburg*	Blakeslee House
Proffitt, George Henry	V 58		53 Wyola Dr.
Prolman, Norman Robert	V 57	*Lewiston, Me.*	33 May
Pure, Robert Hanley	58	*Roxbury*	Estabrook Hall
Pusateri, Vincent Peter	55		5 Astrid Ave.
Quirk, Warren Michael	V 58	*Shrewsbury*	
Raina, Preduman Krishen	H S	*Srinagar, Kashmir, India*	7 Kilby
Rako, Julius	58	*New York, N. Y.*	Estabrook Hall
Ramsey, Carol Webster	B s	*Holden*	
*Raphaelson, Arnold Herbert	Ec g		20 Garland
Raphaelson, Milton Howard	V 58		44 Lakeside Ave.
*Rassias, Charles Nicholas	H S		20 Hackfeld Rd.
Rassias, John Nicholas	55		20 Hackfeld Rd.
Rauscher, William Charles	V 56		3 Veterans Ave.
Reddington, Eleanor Burnap	55		8 Dixon Ave.
Reilly, James Alfred	58	*Shrewsbury*	
Remillard, Arthur Joseph, Jr.	V 57		324 Grafton
Remmer, Harvey Ira	58		78 Upsala
Renny, Edward	G g	*Mandalay West, Burma*	35 May
Resh, Fred Leonard	57	*Providence, R. I.*	11 Charlotte
Resnick, Idrian Navarre	58	*Buffalo, N. Y.*	Estabrook Hall
Rhodes, Frederick Lawrence, Jr.	56		4 Allen
Ribb, Cynthia Marie	58		15 Windham
Rice, Jerald Arthur	58	*Millbury*	
Rice, Thomas Frederick	V 57	*Buzzards Bay*	11 Hawthorne
Richard, Alfred Joseph	V Ch F	*Gardner*	
Richardson, Anna	58	*Wellesley*	
*Richardson, Guy Prescott	V 56	*North Grafton*	
Richason, George Robert, Jr.	V Ch g	*Amherst*	
Ricker, Frances Emily	H g	*Portland, Me.*	56 Maywood
Riordan, Joan Frances	55	*Holden*	
Ritter, Frederick Arnold	G S	*Baltimore, Md.*	898 Main
Rizakou, Mary Panagiotis	58	*Athens, Greece*	118 Woodland
Roberts, Joan Bernice	55	*Millbury*	
Robes, Robert Ernest	V 57	*Westford*	8 Crystal
Rodger, Howard Chase	58	*Hudson*	
Rogers, Ryland Fuller	V 56		6 Prouty Lane
Rogstad, Ronald Harry	57	*Winchendon*	60 Downing
Rosenberg, Henry Ernest	55	*Hempstead, N. Y.*	42 May
Rosengart, Carl Lester	55	*Arverne, N. Y.*	100 Woodland
Rosenthal, Marion Anne	56	*Far Rockaway, N. Y.*	Fanning House
Rossinow, Edward	V 58	*Brooklyn, N. Y.*	Estabrook Hall
Roulet, Mary Anne	56	*Medusa, N. Y.*	Woodland House

Name	*Classification*	*Home Address*	*Local Address*
Royston, Patricia Mae	56	*Auburn*	
Rukan, Stephen	58	*Newtown, Conn.*	Estabrook Hall
Russell, David Alan	56	*Auburn*	
Sacovitch, William James	57		8 Quinsigamond Ave.
St. Jean, Ronald Steven	56		42 So. Lenox
Salem, William John	V Ch g		394 Grafton
Salo, Lennart Reino	55		17 Orne
Saltzman, Henry Victor	55	*New Bedford*	15 Oberlin
Samaha, Frederick James	56		32 Ashwood
*Samara, Lorice Helen	56		49 Arthur
Sarando, Stephen Plato	58		12 Page
Sardonini, Joseph Michael, Jr.	56	*Milford*	
Sas, Anthony	G F		4 Downing
Sault, Louis John	V 56		16 William
Savulis, Mrs. Winifred Jarvis	Ed S	*Auburn*	
Scannell, William Gerald	V 58		58 Wachusett
Schanberg, Saul Murray	B g	*Clinton*	59 Maywood
Scheel, Eugene Mehlman	57	*New Rochelle, N. Y.*	145 Woodland
Schoolman, Leonard Arthur	57	*Mt. Vernon, N. Y.*	145 Woodland
Schotte, Carol Hazel	55		18 Brighton Rd.
Schulhoff, Celia Lila	Ed g	*Athol*	118 Woodland
Schulhoff, Diane Irma	55	*Athol*	118 Woodland
Schultz, Barbara Joan	57		31 Lenox
Schwarzkopf, Susan	57	*New York, N. Y.*	Blakeslee House
Schweitzer, Jerome Howard	55	*Wellesley*	
Sears, Keith Gaskin	57	*Woodstock, Conn.*	
Seery, Michael Eugene	58	*Brookfield*	1 Kilby
Seligman, Fred	58	*Rego Park, N. Y.*	Estabrook Hall
Sergent, Dorothy Joan	57	*Rutland*	10 Burgess Rd.
Shamoian, Charles Anthony	B g		1 Kilby
Shannin, John	58		21 Richards
Shapira, Nathaniel Abram	55	*Brockton*	14 Oberlin
Shapiro, Bernard David	57	*Forest Hills, N. Y.*	9 Hawthorne
Shapiro, Paul Jay	57	*New Haven, Conn.*	10 Charlotte
*Shaughnessy, Anna Camilla	Ed g		28 Maywood
Shaw, Sondra Lee	58	*Forest Hills, N. Y.*	118 Woodland
Sheleg, Boris	56		70 Maywood
Shen, Irene I-chuan	56	*Great Neck, N. Y.*	Blakeslee House
Shen, Shih-Ping	s	*Taipeh, Formosa*	670 W. Boylston
Shepeluk, Wasily, Jr.	55		61 Rodney
Sher, Gary	56	*Brooklyn, N. Y.*	40 Richards
Shorr, Muriel	58	*New Haven, Conn.*	118 Woodland
Shulman, Davida Elaine (Bowman)	57		37 Dellwood Rd.
Siegel, Rolland Victor	55	*New York, N. Y.*	35 Maywood
Siegel, Stephen Jeffrey	58	*Mt. Vernon, N. Y.*	Estabrook Hall
Sigalis, William Charles	55		10 Cottage

Name	*Classification*	*Home Address*	*Local Address*
Silverzweig, Stanley	58	*Laurelton, N. Y.*	Estabrook Hall
Simmons, David Jay	B g	*Malden*	3 Hartshorn Ave.
Simonelli, Mary Lucy	G g		12 Batavia
Simpson, Mrs. Barbara Hartwell	55	*Leominster*	
Singer, Shirley Sally	56	*Brooklyn, N. Y.*	Woodland House
Sinnery, Donald James	57		2 Ontario
Siok, Barbara Ann	58	*Clinton*	
Sivert, Sandra King	55	*Clinton*	Blakeslee House
Slater, Donald	57	*New York, N. Y.*	54 So. Lenox
Smelewicz, William Patrick	V 57		3 Ingalls
*Smith, George Livingston	58	*Troy, N. Y.*	Estabrook Hall
Smith, Harold Dwight, Jr.	Ed g		34 Canterbury
Smith, Harry William, Jr.	56	*Auburn*	
Smith, Mrs. Jacqueline Dora	B g	*Hubbardston*	
Smith, Marc Paul	56		3 Tahanto Rd.
Smith, Raymond Rodolphe	V 55	*Westboro*	
Smith, Theodore Rubin	57	*Bronx, N. Y.*	40 Richards
Smith, Venice Mae	s	*Farnumsville*	
Snyder, Alan Michael	57	*Staten Island, N. Y.*	74 Woodland
Snyder, Ronald Fred	56	*Albany, N. Y.*	40 Richards
Sobel, Marlene Charlotte	56	*Waterbury, Conn.*	Woodland House
Solomon, Seymour Arnold	55		11 Russell
*Somers, Michael Eugene	V B g		42 Kingsbury
Spadaro, Gloria Crolly	Ed g	*Leominster*	
Spalding, Judson Wylder	s		875½ Main
Sparicio, Frank Joseph	G S	*Everett*	4 Hancock
Speier, Sybil Dorothy	Ps S	*Washington, D. C.*	10 Grand
Spurr, Arnold Newton	57	*Southboro*	
Stanton, Betty Ann	58	*Clinton*	
Starbird, Myron Ellwood	V G F	*Farmington, Me.*	38 Benefit
Starr, Caryl Enid	57	*Westbury, L. I., N. Y.*	Fanning House
Stead, Mrs. Anna Marie	Ed g		24 Tiverton Pkwy.
Stead, Mrs. Isabelle Mary	Ed g	*Auburn*	
Steffon, Mary Ann	58	*Grafton*	
Stein, Harold Charles	58	*Riverview, Hudson, N. Y.*	Estabrook Hall
Steinberg, Lloyd Bernard	57	*Scarsdale, N. Y.*	74 Woodland
Steinberg, Morton	V 57		80 Houghton
Steinberg, Norman	56		80 Houghton
Steinbrecher, Stephen	55	*Westport, Conn.*	6 Gates
Stekler, Herrmann Otto	55		55 Wachusett
Stelzer, Carole Wendy	58	*New York, N. Y.*	118 Woodland
Stern, Albert	56	*New York, N. Y.*	40 Richards
Sternberg, Ralph	G g	*Newark, N. J.*	905 Main
Still, Gerald Maxwell	56	*New Haven, Conn.*	36 Richards
*Stoddard, Judith	57		19 Monmouth Rd.
Stout, Thomas McBride	57		3 Tuckerman

Name	*Classification*	*Home Address*	*Local Address*
Strandberg, Victor Hugo	57	*Shrewsbury*	16 Marble
Streichler, Allan Martin	56	*Brooklyn, N. Y.*	36 Richards
Sullivan, Donald William	V 55	*Gilbertville*	
Sullivan, Helen Theresa	56		45 Charlotte
Sullivan, Neil Joseph	55	*Gilbertville*	
Sundquist, Birgit Marie	55		53 Uncatena Ave.
Suzuki, Yukiko	57	*Tochigiken, Japan*	Blakeslee House
Takeuchi, Nobuhiko	58	*Kobe, Japan*	Estabrook Hall
Tateosian, John	55		129 Belmont
Taylor, Alvin Elliott	55	*Deering, N. H.*	16 Marble
Teshoian, Sarkis	58		20 Abbott
Thomas, Daniel Walter	Ch F		5 View
Thomas, Jeanette McPherson	57	*Bergenfield, N. J.*	Woodland House
Thomashow, Saul Leonard	56		965 Pleasant
Thompson, Richard Gerald	56		3 Minthorne
Thompson, Shelby Walker	56	*Wellesley*	Woodland House
Tibbetts, Robert Austin	55		6 Salisbury Crag
Todd, Robert Edward	V Ed g		1 Allendale
Tomajan, Carol	55	*Holden*	
Trachtenberg, Naomi Etta	56	*Brooklyn, N. Y.*	Woodland House
Traina, Angelo John	56	*Flushing, N. Y.*	36 Richards
*Traub, Mrs. Lois Speckter	55	*Southbridge*	
Tremblay, Bernard Henry	Ed g	*Jefferson*	
Troianello, Emilio Joseph	Ch F	*Lawrence*	6 Gates
Troy, Patricia Ann	58		105 Hillcroft Ave
Tsourides, Konstantine Nicholas	57		84 Madison
Tucker, Barbara Ann	57		40 Brighton Rd.
Turkson, Yaw Bamful	56	*Gold Coast, Brit. W. Africa*	20 Gates
Ursin, Michael Jay	58	*Weston*	Estabrook Hall
Utsunomiya, Takeshi	56	*Tokyo, Japan*	6 Downing
*Valente, Louis John	56	*Milford*	
van der Linden, Alfons Joseph	Ed g		670 W. Boylston
van Leeuwen, Philip Carleton	58		9 Euclid Ave.
Van Tuyl, Harry Edward, Jr.	G g	*Leavenworth, Kan.*	11 Hawthorne
*Varma, Kripa Nath	G F	*Ghazipur City, U. P., India*	35 May
Vierstra, Andrew, Jr.	56	*Whitinsville*	
*Villa, Luis Alberto	55	*Medellin, Colombia, S. A.*	11 Charlotte
Von der Heide, John Thomas, Jr.	V H S	*Scarsdale, N. Y.*	171 Woodland
Waddleton, William John	V 56	*Oxford*	
Wait, Albert Huntoon, Jr.	57	*Waban*	31 May
Walker, Barry Jay	58		37 Creswell Rd.
Walker, Philip Edward	V 58		56 Bowdoin
Warden, William Ernest	55	*Oxford*	
Wardwell, Anne	57	*Amherst*	Fanning House
Ware, Barbara Ann	56		32 Irving
Warfield, Joan	57		21 Arletta Ave.
Warner, John Frederick, Jr.	V Ed g	*Clinton*	

Name	*Classification*	*Home Address*	*Local Address*
Waters, Virginia Marie	58		16 No. Steele
Waxman, Norman	58	*New York, N. Y.*	Estabrook Hall
Wehrli, Robert William	58	*Auburn*	
Weinbaum, Rachel	58	*New York, N. Y.*	118 Woodland
Weinberger, Leon Judah	57	*Clinton*	
Weinstein, David Jacob	58	*Waban*	Estabrook Hall
Weir, Alastair James	Ps Hon. F	*Glasgow, Scotland*	926 Main
Weisenberg, Gerald Melvin	57	*Bellerose, L. I., N. Y.*	54 So. Lenox
Weisman, Burton Stuart	56		26 Loxwood
Weiss, Ann Elizabeth	57	*Arlington, Va.*	Fanning House
Weisselberg, Edward Bernard	56	*Leonia, N. J.*	11 Charlotte
Weller, Arnold Clare, Jr.	55	*Rutland*	35 Maywood
Whitney, Alden Eames	55		4 Saxon Rd.
Whitney, Dorothy Nina	55	*Oxford*	Fanning House
Whittier, Edward Dearborn	V 56	*Augusta, Me.*	16 Oread
Wichers, Gerard Van Buttingha	V 56	*Baarn, Holland*	66 Maywood
Wicks, Robert Haskell	V 55		44 Bellevue
Wiener, Ruth Janet	58	*Bedford, Pa.*	118 Woodland
Wightman, James Warren	Ec g	*Carneys Point, N. J.*	48 Downing
Wilensky, Barbara Dee	58		7 Argyle
Williams, Kathleen Melody	58	*Denver, Col.*	784 Main, Leominster
Williams, Roger Irving	55	*Boylston*	
Williston, Frank Samuel	56	*Fayetteville, N. C.*	766 Main
*Wilson, Carol	Ed g		11 Berwick
Witt, Albert Vito	V Ed g	*Leicester*	
*Wondolowski, Anthony Stanislaus	V H g		28 Washburn
Woodis, Ruth Grosvenor	Ed g		79 Elm
Wray, Norman Leslie	56	*Wilkinsonville*	
Wright, Robert Lewis	56		148 Dewey
Wuethrich, Chris John	57	*Newton*	16 Marble
Wylan, Louise Mary	56	*Long Island City, N. Y.*	Fanning House
Yaffe, Monte Earl	56	*Newton*	
Yahnian, Ovsanna Haroutioun	58	*Beirut, Lebanon*	626 Southbridge
Young, Donald Roland	57	*Arverne, N. Y.*	10 Charlotte
Young, Frederick William	58	*Auburn*	
Young, Mrs. Helen Troy	H g		53 Elm
Yun, Seung Soo	58	*Seoul, Korea*	Estabrook Hall
Zaltas, Arnold Irving	55	*Natick*	47 Midland
Zamanigian, Elizabeth Barbara	56		118 Eastern Ave.
Zambarano, Paul Joseph	58		1 East Park Ter.
Zarr, Melvyn Herbert	58		17 Kilby
Ziarko, Margaret Ann	57	*Webster*	
Zitowitz, Charlotte	Ec s		47 Dellwood Rd.
Zolnowski, Elizabeth Ann	55		59 Seymour
Zulauf, Donald Cole	58	*Tenafly, N. J.*	Estabrook Hall
Zura, Dorothy Elaine	57	*Providence, R. I.*	Fanning House

I (2). GRADUATE STUDENTS, COLLEGE STUDENTS AND SPECIAL STUDENTS IN ATTENDANCE DURING THE SECOND SEMESTER ONLY

Name	*Classification*	*Home Address*	*Local Address*
Argento, Barry James	Ed g		3 Homer
Babbidge, Theresa G.	Ed g		54 Hollywood
Brennan, David Bernard	V 57	*Leominster*	
Cameron, Bernard Joseph	V 58		9 Esther
Christoph, Eugene Charles	V Ed g	*Erie, Pa.*	Bennett Lane So. Lancaster
Clark, Carolyn Janet	Ed g		63 Barnard Rd.
Clark, Gilmore Norman	57	*Malden*	16 Gates
Comalli, Peter Elia, Jr.	Ps F		
Donway, Mrs. Helen B.	s	*Holden*	
Fraga, Louis Maurice	V Ec g		89 St. Nicholas Ave.
Frost, Helen Houston	s		91 Salisbury
Goldrosen, Ruth R.	s		39 Creswell Rd.
Hoffner, Burton Paul	57	*Arverne, N. Y.*	989 Main
Hsu, Chao Fan	Ec S	*Taipei, Formosa*	20 Gates
Johnson, Margery Ruth	H F	*Spokane, Wash.*	Box 375, Sterling
Juhn, Sungil	58	*Taegu, Korea*	Estabrook Hall
Kaplan, Joseph Henry Herbst	58	*Brooklyn, N. Y.*	Estabrook Hall
Kim, Hak Hyun	58	*Chulla Nam Do, Korea*	Estabrook Hall
Krawczynski, Thaddeus Mitchell, Jr.	58		766 Main
Larrivee, Mrs. Gertrude Palmer	Ch g		168 Beaconsfield Rd.
Lavery, Edward Wright	57	*Fitchburg*	Estabrook Hall
Le Beau, Raoul Joseph	V 57	*East Brookfield*	
Leclerc, Alcide Rene	V 58	*So. Somerset*	
Lynch, Russell Gerald	V 57	*Leominster*	
Mahoney, Paul Shea	57		43 Brownell
Modlinger, Ralph Elmer	V Ch g	*Sterling Jct.*	
McKie, Margery Anne	G g	*Sherman, Texas*	Elmwood St., Millbury
O'Neill, Gerald Thomas	s	*Stroudsburg, Pa.*	24 Oread St.
Parker, Fred Walter	55		38 Lakeside Ave.
Perry, Francis Xavier	58	*Rochdale*	
Porter, Wayne Whitimore	V 56	*Wolcott, N. Y.*	1 Tiverton Pkwy.
Ramsdell, Herbert Francis, Jr.	s		2 Chiltern Hill Dr.
Renaldo, Shirley Esther	s	*Shrewsbury*	
Ribner, Herbert	s		34 Vassar
Rizkalla, Janet Catherine	Ed g		15 Acton
Robinson, Sallie Joanna	58		412 Lincoln
Savulis, Anthony Vincent	58	*Auburn*	
Shields, William Bernard	s		28 Carlisle
Slepian, Howard Joseph	Ps g	*Brooklyn, N. Y.*	95 Gordon St. Brighton
Swenson, Carl Robert	57	*West Boylston*	

Name	*Classification*	*Home Address*	*Local Address*
Tully, Edward Luke	H g	*Harvard*	926 Main
Vick, Kenneth Stuart	58	*Holden*	
Wilmarth, Madelin Alma	Ed s		9 Benjamin Rd.
Zani, Dominic, Jr.	56	*Wellesley*	976 Main
Zanio, Constance Lee	58	*Kenosha, Wis.*	228 Park Ave.

I (3). STUDENTS IN RESIDENCE LESS THAN ONE SEMESTER

Alexander, Valavuchirackal Kurien	Ps F
Bagley, Richard	V H g
Baraf, Joseph Elliot	56
Bergman, Ronald Allen	56
Bjorklund, Mrs. Henny V. M.	s
Connors, Mrs. Ruth Joan	Ed g
Emmons, Peter Augustus	58
Emory, Jewel Ann	s
Faletra, Joseph Louis	V s
Finn, Patricia Anne Marie	57
Fitzgerald, William John	V 58
Huard, Roland Joseph	V 58
Johnson, Hilding Conrad	V 58
Karagheusian, Carl	V 57
Kass, Israel	56
Renaud, Leo Arthur	V 57
St. Onge, Remi Louis	V 57
Sinnott, Patricia Rosealba	s
Suleiman, Fuad Khalil	57
Willoughby, Bertram Russel	58
Zajac, Leo Walter	V 57

II. SUMMER SCHOOL STUDENTS—1954

Ahmadjian, Vernon, Whitinsville
Al-Ani, Khattab, Baghdad, Iraq
Al-Khashab, Wafiq H., Baghdad, Iraq
Al-Maiyah, Ali M., Baghdad, Iraq
Almasian, Anthony H., Massena, N. Y.
Al-Shalash, Ali M., Baghdad, Iraq
Baker, Simon, Revere
Bicknell, Donna, Worcester
Blanchard, Virginia A., N. Uxbridge
Borjeson, Howard P., Holden
Boucher, Phyllis, R., Plymouth
Bracani, Donald R., Leominster
Buron, Robert W., Worcester
Caligaris, Conrad P., Leominster
Conant, Bryant L., Auburn
Cormier, Carlton F., Winchendon
Cushing, John D., Northfield, Vt.
DeLeon P., Raquel Maria, Panama, Rep. of Pan.
Derosier, Robert F., Leominster
DiVerdi, Angelo M., Shrewsbury
Dusseault, Bernard L., Pawtucket, R. I.
Evensen, Doris M., Gardner
Feldt, Nancy A., Auburn
Finneran, James H., Worcester
Finney, Thomas W., Worcester
Flagler, Ruth A., Worcester
Forzley, Philip, Worcester
Fregans, Janet Mae, Holden
Gaucher, Adrian A., Southbridge
George, Gordon B., Shrewsbury
Ginsberg, Howard, Worcester
Glattstein, Gloria G., Worcester
Goss, Robert W., Fitchburg
Greelish, Virginia A., Worcester
Gurney, Fred V., Amesbury
Hacanis, Andrew J., Worcester
Harris, Benjamin C., Worcester
Herideen, Richard M., Webster
Higgins, Mary G., Worcester
Hill, Lennard A., Milford
Hulbert, Clifton H., Worcester
Hutchinson, Robert H., Clinton
Jones, Marilyn A., Shrewsbury
Jordan, Winthrop D., Worcester
Kelley, Mrs. Dorothy M., Worcester
Kelley, Justin J., Worcester
King, Valerie, Worcester

Kirk, Robert N., Presque Isle, Me.
Koch, Forrest E., Sullivan, Mo.
Laws, John S., Worcester
Lockhart, John, Worcester
Lyons, Barbara A., Brookfield
Mader, James W., Jr., Wichita, Kas.
Maguire, Richard C., Old Orchard Beach, Me.
Markot, Joseph P., Dudley
Mathews, Constance A., Worcester
Mayer, Joseph, Asbury Park, N. J.
McCarron, Paul J., Worcester
McKay, Janel A., Holden
Melder, Keith E., Worcester
Mendoza, Walter E., Millis
Miller, Louis, Worcester
Moran, Raymond K., Worcester
Murnik, James M., Fitchburg
Nabhan, Robert C., Worcester
Nazzaro, John, Medford
Newell, Alan H., Worcester
Norcross, Carol E., Poughkeepsie, N. Y.
Noponen, Francis W., Worcester
Olund, Robert N., Auburn
*O'Malley, William X., Worcester
Patterson, Janet A., Worcester
Plakstis, Peter J., Jr., Worcester
Porter, Gerald D., Worcester
Potter-Bernier, Elaine I., New Bedford
Proffitt, George H., Worcester
Quitadamo, Frank J., Worcester
Remillard, Arthur J., Jr., Grafton
Rice, Daniel H., III, Worcester
Rodger, H. Chase, Hudson
Rourke, John F., Worcester
Royston, Patricia M., Auburn
Salo, Lennart R., Worcester
Savulis, Winifred J., Auburn
Schuster, Kay, East Douglas
Shannon, Jean M., Worcester
Shaughnessy, Anna C., Worcester
Shaw, Arnold R., Worcester
Shea, Gertrude A., Worcester
Sheehan, Patrick V., Worcester
Shepeluk, Wasily, Jr., Worcester
Shwadran, Benjamin, Jersey City, N. J.
Sinnery, Donald J., Worcester
Smith, Raymond R., Westboro
Somers, Michael E., Worcester
Spadaro, Gloria C., Leominster
Sternberg, Ralph, Newark, N. J.
Stout, Thomas M., Worcester
Sullivan, Donald W., Gilbertville
Symonds, Merrill A., Worcester
Tandy, Clara S., Worcester
Thomashow, Saul L., Worcester
Todd, Robert E., Worcester
van der Linden, Alfons J., Worcester
*Waldron, Robert J., Rochdale
Weinberger, Leon J., Clinton
Weiner, Robert S., Ossining, N. Y.
Werda, John M., Lawrence
West, Togo D., Winston-Salem, N. C.
Williams, Kathleen M., Leominster
Witt, Albert V., Leicester
Woodis, Ruth G., Worcester
Woznicki, Arthur E., Dudley
Young, Judy B., Worcester
Zierold, Joan B., Southbridge
Zitowitz, Charlotte, Worcester

---

* In residence a part of the session only.

SUMMARY (1954-55)

			Men	*Women*	*Total*
Undergraduate Students	*Men*	*Women*	454	186	640
Freshmen	118	58			
Sophomores	118	45			
Juniors	126	47			
Seniors	92	36			
Graduate Students			118	40	158
Special Students			17	15	32
Summer School (1954)			82	34	116
Total			671	275	946
Less Duplications			42	13	55
Net Total			629	262	891

Degrees Conferred

In the Calendar Year 1954

BACHELOR OF ARTS

Donald John Aharonian
Barbara Norris Anderson
*Constance Ernest Anderson
James Thomas Angelos
Robert Edmond Avey
Warren Rud Babor
Robert Burns Barker
  with Honor in General Course
Marcel René Benjamin
Richard Paul Besnia
*Edwin Carpenter Bliss
John Earl Bley, Jr.
Edward Bloch
Gerald Alan Bloomgarden
Patricia Benton Bowker
John Douglas Bragg
Shirley Hope Brotherton
David MacGregor Burton
  with Honor in General Course
Richard David Carlson
  with Honors in Chemistry
Georgiana Mae Charron
Eugene Sheu Theung Chin
Janet Louise Companion
Paul Cromidas
Dominic Stephen D'Angona
Roberta Louise Davis
Sallye Joyce Dawson
Irwin Lawrence Dickman
Robert Collyer Douthit
Rae Edythe Downey
Daniel Joseph Ehrlich
Alan David Elbein
Carolyn Ann Erickson
  with Honor in General Course and
  with Honors in Economics and
  Sociology
Richard Bruce Erickson
  with Honors in Geography
*Joseph Carmel Feeley
Constance Rose Fischer
Elizabeth Mary Foley
Gladys Mary Forzley
Ruth Magdalene Gauch
  with Honors in Romance Languages
Matthew Roland Giuffrida
  with Honor in General Course
*James Alexander Givan, Jr.
Selma Bernice Gottlieb
Joan Beverly Greenbaum
William Lawrence Haith
Joseph Edward Hickey, Jr.
  with Honors in Geography
Mary Ann Higgins
*Ralph Donald Hoaglund
Anna Ottoson Johnson
Anne Carolyn Johnson
Demeter Theodore Karaku
Elizabeth Louise Keenan
Maureen Ellen Kelly
Margaret Anne Kittredge
  with Honor in General Course and
  with Honors in Romance Languages
Isabel Katherine Konjoian
Alphonse Leon Lacouture, Jr.
Barbara Shippee LaRocque
*Elfrida Lasmane
Raymond Thomas Lavendier
Robert Earl Lawton
Virginia Anne LeVasseur
Peter Koleman Levison
  with Honor in General Course and
  with Honors in Psychology

---

*Degree awarded "as of" June 7, 1953

Charles Arthur Lindberg
with Honors in Geography
Robert Earle Lingner
Herbert Lubowitz
with Honor in General Course
Anthony John Malankowski
Phyllis Toby Mallen
†Carl Yale Malmquist, Jr.
*Leo Leamy Mann
*Stanley Joseph Mann
Robert Andrew Markham
Lois Marion Martus
Margery Anne McKie
Francis Joseph McSherry
Iphigenia Moschos
Mary Elizabeth Nagle
William Paul O'Brien
Robert Hornby Patterson
*Harold Lee Peacock, Jr.
Jane Frances Perry
with High Honor in General Course
Janet Frederika Peterson
Haydeé Pinero
*James Francis Riordan
Janet Catherine Rizkalla
Ruth Elizabeth Rodier
*Joseph James Rollins
Carl Sanford Rosen
Edward Sachs
Minerva Mildred Sarando
John Robert Scarborough
with Honors in Philosophy
Saul Murray Schanberg
Celia Lila Schulhoff
*Allen Joseph Sevigny
Charles Anthony Shamoian
Harry Pickford Shirley, Jr.
Subhia Mikdadi Showket
Arleen Simon
Jean Marion Simonian
Austin Chadwick Stern
Lauraine Mae Stewart
Gretchen Beatrice Stout
*Earl Robert Taylor
Theodore Stone Thamel
Francis Noel Theriault
with Honors in Economics and Sociology
Anthony Warren Thurston
Adrian Eric van Leeuwen
with High Honor in General Course and with Honors in Philosophy
John Thomas Von der Heide, Jr.
*Bertram Braithe Walker
Roy Harold Wheeler
Harvey Louis Williams
with High Honor in General Course
Walter Zakrzewski, Jr.

---

*Degree awarded "as of" June 7, 1953
†Degree awarded "as of" June 2, 1944

BACHELOR OF BUSINESS ADMINISTRATION

John Stanley Adamsky, Jr.
*Edward Cyril Ahern
Richard Joint Baker
Elden George Berthold, Jr.
Bertil Carl Blomgren
*George Hagop Boole, Jr.
William Frederick Bruso
Bernard Dennen Callahan
Norman Walter Couch, Jr.
  with Honors in Business Administration
Robert Paul Couillard
James William Daly
Charles Allen DeMerritt, Jr.
Gerard Adolphe Gallant
*Abdul Rashid Ismail
Roland Leo Jandron
Christe Frank Koskinas
Frank Harry Lambros
George Milton Lazarus
Francis Patrick McCarney, Jr.
Francis Joseph McManus
Dean Francis Morgantini
Charles Joseph Murphy
Stanley Jordan Pelletz
Marvin Rosenbaum
Ralph Howard Saunders
Ida Smith
John Bernard Stanick
Donald Fuller Stoddard
Harold Leif Eric Tonseth
*Holmes Vinton Tracy, Jr.

MASTER OF ARTS

Virginia Anne Aldrich
Amilcare Biancheria
Gregory Louis Boisvert
Herbert Floyd Crovitz
Haig Cadmus Donoian
David Franklin Edwards, Jr.
Esther Heller Handleman
Warren Keith Heckman
Helen Marie Hyytiainen
Lane Joseph Johnson
William Francis Kane, Jr.
Frank Sydney Kelland
Marylin Coombs Kelland
Roger Gerard Lacoste
Joy Churston Love
George Francis Madaus
Walter Shaw McLean
Philip George Meissner
Vsevolod Mihajlov
Nelson Edwin Ockerbloom
Godwin Anibeze Odenigwe
Janet Ann Patterson
Harriett Amster Podell
Etha Marie Pruser
Robert Daniel Weitzel, Jr.

MASTER OF ARTS IN EDUCATION

Helen Maxwell Hamilton
William John Novick
Russell Herbert Stanhope

DOCTOR OF PHILOSOPHY

Harold Walter Adams
Jen-Hu Chang
Joseph Church
John Henry Dean
Mohammad Hassan Ganji
Joseph Bixby Hoyt
Irving Hurwitz
Alice Kastenbaum Kruger

---

*Degree awarded "as of" June 7, 1953

John Everett Lane
Herbert Lipton
Robert Caesar Misch
Herman L Nelson
Robert Alfred Nelson
Azra Husain Rahman-Khan
Ibrahim Showket
Michael John Skrypa
Lester Wendell Trueblood
Mary Tewksbury Wilson

HONORARY DEGREES

Douglas Berry Copland	Doctor of Laws
Homer Payson Little	Doctor of Laws
Louis Ten Eyck Thompson	Doctor of Science
Paul Johannes Tillich	Doctor of Humane Letters

SUMMARY

Degrees in Course 1954		*Honorary Degrees*	
Bachelor of Arts	108	Doctor of Laws	2
Bachelor of Business Administration	30	Doctor of Humane Letters	1
Master of Arts	25	Doctor of Science	1
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CLARK UNIVERSITY

Sixty-fifth Annual Commencement

Worcester Memorial Auditorium

SUNDAY, JUNE 5, 1955

MDCCCLXXXVII

WORCESTER, MASSACHUSETTS

Order of Exercises

Organ Music	
Chorale Prelude	*Bach*
Concerto No. V	*Handel*
Processional	
Grand March (from *Tannhauser*)	*Wagner*
Invocation	THE REVEREND WALTER DONALD KRING Minister, First Unitarian Church of Worcester
Welcome by the President	DOCTOR HOWARD BONAR JEFFERSON
Commencement Address	ROBERT CUTLER Chairman, Old Colony Trust Company, Boston, Formerly, Administrative Assistant to President Eisenhower
Conferring of Degrees	
Benediction	THE REVEREND WALTER DONALD KRING
Recessional	
Pomp and Circumstance	*Elgar*

The audience will kindly remain standing during the recessional

Organ Music by Clifford Fowler Green

Candidates for the Degree of Bachelor of Business Administration

Lawrence Paul Barse
Edward Sarkis Bilzerian
Robert Emmett Borglund
Russell Louis Boucher
*Paul Richard Bruso
Keith Hiram Corkum, Jr.
Henry Giles Cosman
James Henry Finneran
Melvin Hugh Gerrol
Leroy Henry Ham, Jr.
Paul Edwin Handleman
Ara Paul Heroian
Theodore Herbert Hurwitz
Charles Kenneth Hutchinson
George William Koutsoubas
Arthur Malcolm Lasoff
Robert Bernard Levy
John William Mahar, Jr.
Clifford Irving Nordwell
Peter John Plakstis, Jr.
Richard William Prensner
Vincent Peter Pusateri
John Nicholas Rassias
Henry Victor Saltzman
*Edwin Eugene Sherburne
Barbara Hartwell Simpson
Luis Alberto Villa
Arnold Irving Zaltas

Candidate for the Degree of Bachelor of Business Administration with Honor

Conrad Peter Caligaris *with Honor in General Course*

**As of June 6, 1954*

Candidates for the Degree of Bachelor of Arts

Merritt Agabian
Richard Earl Ashley
George LaForest Bailey
Stanley Bank
Richard Kent Blair
Marie Ann Bondanza
Gloria Ann Bouley
Bernice Mary Burdulis
Patricia Ann Burns
Herbert Hartley Butterworth
Bryant Walter Card
†Marilyn Cooke Carlon
*Francis Leslie Carney, Jr.
Sally Ann Chapman
Bryant Lee Conant
Donald Wayne Cowen
Robert Lee Crawford
Paul Walter Crowley, Jr.
Michael Jerome Daspin
Edmund Rushmore Dawson
William Joseph Demers, Jr.
Elliot Maurice Ephraim
Nancy Ann Feldt
Martin Barry Flint
Martin Joseph Foley, Jr.
Janet Mae Fregans
Joan Wilder Gannon
Suzann Mary Gilrein
Julian Morton Goldstein
Hedda Ruth Grossman
Robert Francis Guerrin
Donald Bruce Gurry
Sally Irene Guthrie
Robert Philip Holmes
Louise Iarussi
Carlotta Althea Jencks
Stephen Lester Jennings
Nancy Ann Johnson
Elaine Revolti Kapanen
Mildred Katz
Robert Fabian King
Sanford Marshall Kirshenbaum
*Costas James Labovites
Donald Richard LaBrie
Norman Raymond Laine
Irwin Stuart Lamm
*Robert Anthony Marsella
Brian Mate
Jan Kasimir Michalski
Francis William Noponen
Chris George Pallas
Fred Walter Parker
Elaine Isabel Potter-Bernier
Eleanor Burnap Reddington
Joan Frances Riordan
Joan Bernice Roberts
Lennart Reino Salo
Carol Hazel Schotte
Diane Irma Schulhoff
Jerome Howard Schweitzer
Nathaniel Abram Shapira
Wasily Shepeluk, Jr.
Rolland Victor Siegel
Raymond Rodolphe Smith
Seymour Arnold Solomon
Stephen Steinbrecher
Donald William Sullivan
Birgit Marie Sundquist
John Tateosian
Alvin Elliott Taylor
Carol Tomajan
Dorothy Nina Whitney
Robert Hascal Wicks
Elizabeth Ann Zolnowski

**As of June 6, 1954*

†*As of June 7, 1953*

Candidates for the Degree of Bachelor of Arts with Honor

Joan Nelson Calverley *with Honor in General Course*

Herbert Howard Hoffner *with Honor in General Course*

Constance Anne Mathews *with Honor in General Course*

Henry Ernest Rosenberg *with Honors in Chemistry*

Sandra King Sivert *with Honor in General Course*

Robert Austin Tibbetts *with Honor in General Course and with Honors in English*

Candidates for the Degree of Bachelor of Arts with High Honor

Cathryn Ann Adamsky *with High Honor in General Course and with Honors in Psychology*

Rhoda Rogosin Gurwitz *with High Honor in General Course*

Alice Louise Martin *with High Honor in General Course*

Carl Lester Rosengart *with High Honor in General Course*

Lois Speckter Traub *with High Honor in General Course*

Alden Eames Whitney *with High Honor in General Course*

Candidate for the Degree of Bachelor of Arts with Highest Honor

Herrmann Otto Stekler *with Highest Honor in General Course and with Honors in Economics and Sociology*

Candidates for the Degree of Master of Arts in Education

Charles Stephen Burke
Gracia Marion Burkill
Vincent George Carvalho
Sallye Joyce Dawson
Eric Martin Friedmann
Henry Francis Leary
Raymond Joseph Martel
Allen Currier Pratt
Anna Camilla Shaughnessy
John Roberts Wason
Darryl Alexander Wiejaczka
Albert Vito Witt

Candidates for the Degree of Master of Arts

Biology

Jane Louise Larson
Michael Eugene Somers

Chemistry

Miasnig Hagopian
George Criton Socrates Inglessis
Harold Charles Jigarjian
Stanley Melvin Klainer
Alfred Joseph Richard
Daniel Walter Thomas

Economics and Sociology

Gerald Francis Madaus

Geography

Khattab Saggar Al-Ani
Wafiq Hussain Al-Khashab
Phyllis Rita Boucher
Warren Hepburn Burton, Jr.
Woodford McDowell Garrigus
Margaret Joan Goodfellow
Stanley Mackun

History, Government, and International Relations

Rolf Juergen Stefan Diekmann
John Thomas Von der Heide, Jr.
Lindsley Elliott Webster

Psychology

Patricia Fitzsimmons Carini
Emma Kraidman

Candidates for the Degree of Doctor of Philosophy

Chemistry

Eliahu Caspi
Vincent Leo Hughes
Paul James McCarthy

Economics and Sociology

Richard William Reed

Geography

John Robert Dunkle
Urban Joseph Linehan
Harriet Ruth Long
Carrie Josephine Moyer
Richard Rainier Randall
Karl Stacey

History, Government, and International Relations

Merrill Augustus Symonds

Psychology

Louis Peter Carini
John Hurley Flavell
Alfred Emmanuel Goldman
Alvin George Goldstein
Henry William Von Holt, Jr.

Conferring of Honorary Degrees

OLIVER MILLS HAYDEN Presented by Jesse Lunt Bullock	*Doctor of Science*
GEORGE LESLIE STOUT Presented by Samuel Pendleton Cowardin, III	*Doctor of Letters*
ROBERT MORSE WOODBURY Presented by James Ackley Maxwell	*Doctor of Laws*
LAURENCE DUDLEY STAMP Presented by Samuel Van Valkenburg	*Doctor of Laws*
ROBERT CUTLER Presented by Dwight Erwin Lee	*Doctor of Laws*

ORDER OF AHEPA PRIZE FOR EXCELLENCE IN GREEK

Stephen Plato Sarando
Gerald Melvin Weisenberg

THE SANFORD MEMORIAL SCHOLARSHIP FUND

Thomas Julius Anton

THE PRENTISS CHENEY HOYT PRIZE IN POETRY

Gerald Melvin Weisenberg

THE HOMER P. LITTLE AWARD IN GEOLOGY

Sylvie June Eriksson

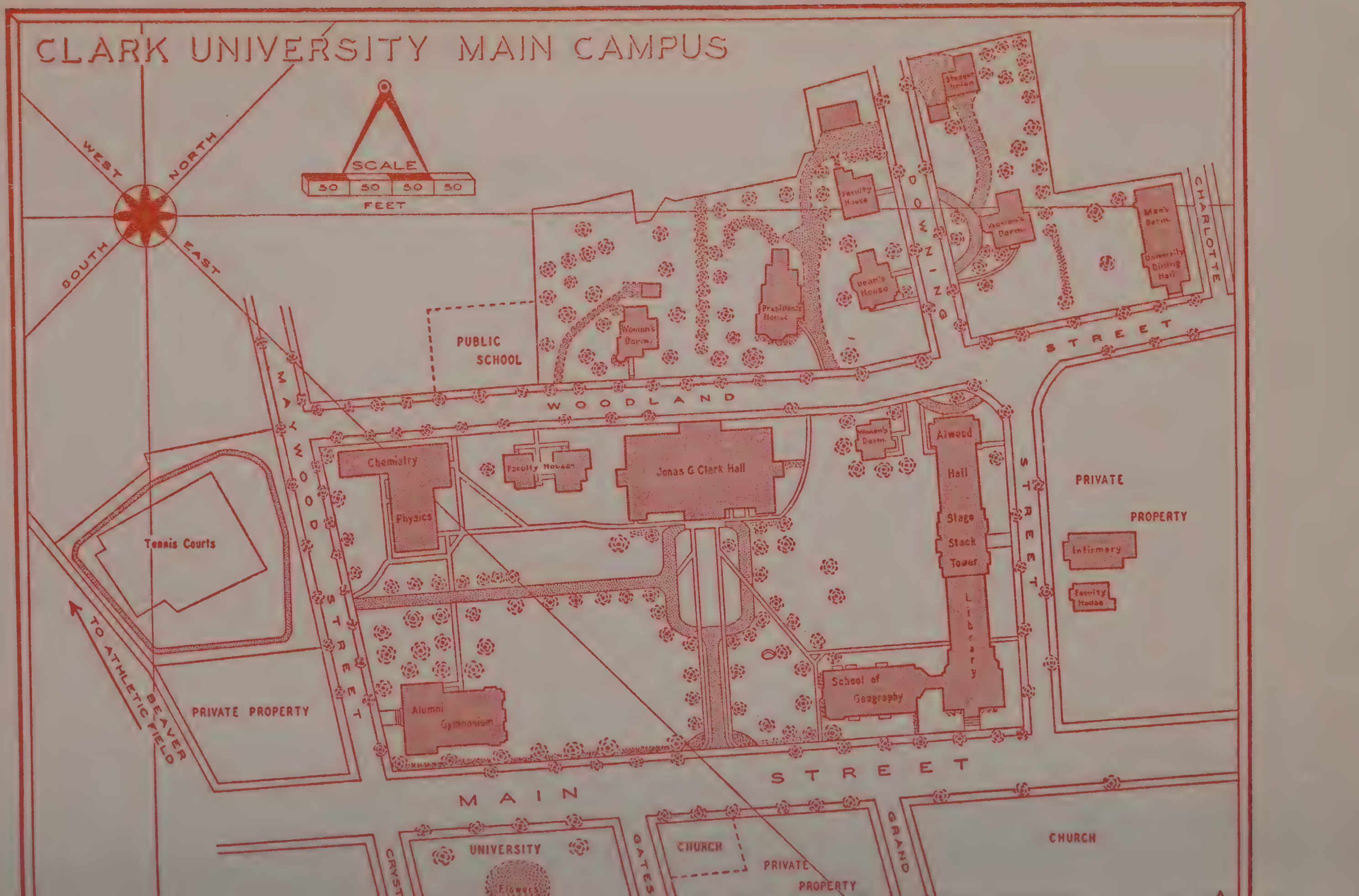
Clark University Bulletin

Number 223 February, 1956

General Catalogue

WORCESTER, MASSACHUSETTS

CLARK UNIVERSITY MAIN CAMPUS


SCALE
50 50 50 50
FEET
NORTH
EAST
SOUTH
WEST
CHARLOTTE
Men's Dorm.
University Dining Hall
Student Union
Women's Dorm.
Faculty House
Dean's House
President's House
DOWNING
STREET
Women's Dorm.
PUBLIC SCHOOL
WOODLAND
PRIVATE PROPERTY
Infirmary
Faculty House
Atwood
Hall
Stage
Stack
Tower
Library
Women's Dorm.
Jonas G Clark Hall
Faculty Houses
Chemistry
Physics
School of Geography
Alumni Gymnasium
MAYWOOD STREET
Tennis Courts
PRIVATE PROPERTY
TO ATHLETIC FIELD
BEAVER
MAIN STREET
CHURCH
GRAND
CHURCH
PRIVATE PROPERTY
GATES
UNIVERSITY
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Clark University Bulletin

Number 223 February, 1956

General Catalogue

A record for the current academic year 1955-56. Such announcements for the year 1956-57 as can be made at the time of publication are included. The university reserves, for itself and its departments, the right to withdraw or change the announcements made in its catalogue.

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1956

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Calendar

The academic year begins on the Monday before the fourth Thursday in September and ends on Saturday before the thirty-eighth Monday. It includes two approximately equal semesters and two vacation periods: two weeks including Christmas Day and New Year's, and one week near the first of April.

The first semester ends on the Saturday before the twentieth Monday and the second semester begins on the twentieth Monday of the academic year.

1955 - 56

First Semester

September 19, Monday. Registration day. Beginning of academic year 1955-56.
October 12, Wednesday. Columbus Day. A holiday.
November 1, Tuesday. Last day for receiving applications for admission to candidacy for the degree of Doctor of Philosophy in June 1956.
November 11, Friday. Armistice Day. Not a holiday.
November 12, Saturday. Mid-semester reports.
November 23, Wednesday. Beginning of Thanksgiving recess at close of classes.
November 28, Monday. End of Thanksgiving recess at 8 a.m.
December 16, Friday. Beginning of Christmas recess at close of classes.

1956

January 3, Tuesday. End of Christmas recess at 8 a.m.
January 10, Tuesday. Registration for second semester. Classes omitted.
January 16, Monday. Beginning of semester examination period.
January 28, Saturday. End of first semester.

Second Semester

January 30, Monday. Beginning of second semester.
February 4, Saturday. Last day for receiving applications for admission to candidacy for the degrees of Master of Arts and Master of Arts in Education in June 1956.
February 22, Wednesday. Washington's Birthday. A holiday.
March 17, Saturday. Mid-semester reports.
March 30, Friday. Beginning of spring recess at close of classes.
April 9, Monday. End of spring recess at 8 a.m.
April 19, Thursday. Patriot's Day. Not a holiday.
May 7, Monday. Dissertations for degree of Doctor of Philosophy due at Registrar's office at 9 a.m.
May 10, Thursday. Last day for senior comprehensive examinations.
May 14, Monday. Theses for degrees of Master of Arts and Master of Arts in Education due at Registrar's office at 9 a.m.
May 16, Wednesday. Classes omitted.
May 17, Thursday. Beginning of semester examination period.
May 30, Wednesday. Memorial Day. A holiday
June 3, Sunday. Commencement Day.

Summer School 1956

June 11, Monday. Beginning of intersession. Registration day.
July 2, Monday. Beginning of summer school. Registration day.
July 4, Wednesday. Independence Day. A holiday.
August 15, Wednesday. Beginning of summer school examination period.
August 17, Friday. End of summer school.

1956 - 57

First Semester

September 24, Monday. Registration day. Beginning of academic year 1956-57.
October 12, Friday. Columbus Day. Not a holiday.
November 1, Thursday. Last day for receiving applications for admission to candidacy for the degree of Doctor of Philosophy in June 1957.
November 11, Sunday. Veterans Day.
November 12, Monday. Not a holiday.
November 19, Monday. Mid-semester reports due at 9 a.m.
November 21, Wednesday. Beginning of Thanksgiving recess at close of classes.
November 26, Monday. End of Thanksgiving recess at 8 a.m.
December 19, Wednesday. Beginning of Christmas recess at close of classes.

1957

January 3, Thursday. End of Christmas recess at 8 a.m.
January 5, Saturday. Registration for second semester.
January 17, Thursday. Classes Omitted.
January 18, Friday. Beginning of semester examination period.
January 29, Tuesday. Beginning of mid-year recess.

Second Semester

February 5, Tuesday. End of mid-year recess at 8 a.m.
Beginning of second semester.
February 9, Saturday. Last day for receiving applications for admission to candidacy for the degree of Master of Arts and Master of Arts in Education in June 1957.
February 22, Friday. Washington's Birthday. Not a holiday.
March 22, Friday. Beginning of spring recess at close of classes.
March 25, Monday. Mid-semester reports due at 9 a.m.
April 1, Monday. End of spring recess at 8 a.m.
April 19, Friday. Patriot's Day. Not a holiday.
May 13, Monday. Dissertations for degree of Doctor of Philosophy due at Registrar's office at 9 a.m.
May 20, Monday. Theses for degrees of Master of Arts and Master of Arts in Education due at Registrar's office at 9 a.m.
May 22, Wednesday. Classes omitted.
May 23, Thursday. Beginning of semester examination period.
May 30, Thursday. Memorial Day. A holiday.
June 9, Sunday. Commencement Day.

A Brief History of the University

Jonas Gilman Clark was a craftsman and an entrepreneur of the hardy New England tradition. He founded Clark University by endowing it with a part of the modest fortune he made as a furniture manufacturer in California during the Gold Rush era.

He returned to his native Worcester and with the assistance of his wife, Susan, and responsible citizens of the community he planned the university. In 1887 a charter was granted in the General Court of the Commonwealth of Massachusetts. Two years later the first buildings had been erected, the faculty organized and by October, 1889, students enrolled.

In establishing the university, Mr. Clark and his colleagues noted that the United States had many schools providing arts education to undergraduates, but only Johns Hopkins University at that time made available advanced studies which placed particular emphasis upon original research and specialized training.

Clark University thus was founded as a graduate school and from 1889 to 1902 it performed a unique function in higher education in America by devoting its attention to an advanced level of education. Today, the university's several graduate schools maintain these original precepts.

Granville Stanley Hall, regarded as the founder of the science of child psychology in America, was the institution's first president. He came to Clark from Johns Hopkins University to organize a scholarly faculty which earned an enviable reputation for the university and decisively created its character.

The first undergraduate college of Clark was established in the fall of 1902 in accord with the provisions of Mr. Clark's will. He believed that earnest young men, often with limited financial resources, could obtain a four-year college education in three years through intensive attention to study.

Clark College for young men was to provide "preparation for citizenship and their work in life". Admission requirements were flexible, but a high standard of scholastic performance was enforced. With serious purpose and hard work an undergraduate student could earn a bachelor of arts degree in only three years.

The ideas of Mr. Clark and the trustees were effectively developed in the educational program which was established during the term of office of Carroll Davidson Wright, who had resigned as first United States Commissioner of Labor to serve as the first president of the college. After the death of President Wright in 1909, Edmund Clark Sanford, professor of psychology in the graduate school was chosen to be president of the college. In 1920, Sanford retired as president of the college, but remained as a professor while Hall retired as president of the graduate school.

Wallace Walter Atwood, professor of physiography at Harvard University, became president of both the graduate and undergraduate departments of the university. The election of President Atwood marked the addition of geography at both graduate and undergraduate levels to the instructional obligations of the university.

As the undergraduate college continued to grow there were significant changes after 1920. The period of residence for the degree of bachelor of arts was increased from three to four years to conform with the customary American collegiate system. The Division of Business Administration was established in 1941 with a program leading to the degree of bachelor of business administration.

Clark remained exclusively a university for men until World War II. The Women's College of Clark University was established by the trustees in 1941 and since 1942 women have been admitted and are eligible for degrees on the same basis as men.

In 1946 President Atwood, upon his retirement, was succeeded by Howard Bonar Jefferson who, at the time of his selection, was professor of philosophy and director of the school of philosophy and religion at Colgate University.

He at once began to strengthen the liberal arts curriculum of the university. An important result of this effort was the establishment at Clark in 1953 of a chapter of Phi Beta Kappa, Lambda of Massachusetts.

Facilities for instruction and research in the physical sciences at Clark will be expanded this year. Sponsored research for government and private agencies has grown within the past four years until today there are more than 25 projects underway in the fields of chemistry, physics, biology and psychology.

In keeping with the renewed emphasis on mathematics in scientific research, the university will add mathematics to the graduate school program, offering a master's degree in mathematics starting with the academic year 1956-57.

Summer sessions at Clark have been maintained for many years. In addition a six-week program of accelerated studies, known as the Intersession, has been added recently to the academic program to provide a variety of courses of special or contemporary interest.

In September, 1953, the Evening College of Clark University was organized to provide a broad selection of credit courses for adults, most of whom have daytime occupations. The evening college grants the bachelor of science degree in general studies and in business administration. Also available is a varied program of non-credit courses, seminars and special lectures of a community service nature.

Worcester and the University

When plans for the new university were taking shape in Mr. Clark's mind, he enlisted the aid of a group of far-sighted and influential Worcester citizens from whom, later, the majority of his original Board of trustees was chosen. In this was set a pattern for coöperation between the university and the community which has persisted throughout the history of the institution.

The intellectual life of the city has been enriched by the contributions of the faculty and of distinguished guests whom the university has brought to Worcester. Members of the staff have served local institutions both public and private in many ways.

The college has opened the door to higher education for hundreds to whom the opportunity would have been denied if they had been forced to seek it elsewhere, while the graduate school has aided the more gifted to proceed to the highest levels of intellectual endeavor. Particularly noteworthy has been the service to teachers in the public school system.

On the other hand, the university has benefited by the support, both financial and intangible, which it has received from the citizens of Worcester. The interchange of services and ideas with the staffs of other Worcester institutions and the opportunity to use their libraries on a reciprocal basis have been invaluable.

There is particularly close coöperation between the Department of Fine Arts and the Worcester Art Museum, between the Department of History and International Relations and the American Antiquarian Society, and between the Department of Psychology and the Worcester State Hospital. The Worcester Public Library and the University Library coöperate by avoiding duplication in the coverage of certain subjects and by a corresponding widening of the coverage in the fields assigned to each.

In short, the university is conscious that it is a part of the community and that, as such, it has both obligations and benefits. Its steadfast purpose is to strengthen the pattern of mutual interdependence and cooperation.

Organization

The Graduate School of Geography offering instruction leading to graduate degrees in Geography.

The Graduate School offering instruction leading to the degrees of Master of Arts and Doctor of Philosophy.

The College for Men (Clark College) offering a general college program leading to the degree of Bachelor of Arts and a vocational program leading to the degree of Bachelor of Business Administration.

The College for Women offering a general college program leading to the degree of Bachelor of Arts and a vocational program leading to the degree of Bachelor of Business Administration.

The Undergraduate Division of Business Administration which supervises the program in Business Administration in the undergraduate colleges.

The Evening College offering programs leading to the degrees of Bachelor of Science in General Studies and Bachelor of Science in Business Administration.

The Library, with an endowment separate from the endowment of the teaching branches of the University.

The Clark University Press, associated with the University for the publication of scientific books and journals.

Buildings and Grounds

THE UNIVERSITY CAMPUS is situated on Main Street about a mile and a quarter from the business center of Worcester. The administrative and educational activities of the University are centered here. On adjacent property facing the campus on Woodland Street, are dormitories, the dining hall, and residences of the President and of the Dean of the College. A small athletic field, opposite the campus on Maywood Street, provides tennis courts and a running track. A larger field, at the corner of Beaver Street and Park Avenue, is used for baseball, soccer, and other sports. The Hadwen Arboretum, the gift of Obadiah B. Hadwen, is a tract of about twenty acres at the intersection of Lovell and May Streets.

THE MAIN BUILDING (Jonas G. Clark Hall), completed in 1889, is a four-story, granite and brick structure containing about ninety rooms. It houses the general academic offices of the University and the offices and classrooms of most of the departments of instruction.

The University Bookstore and the Men's and Women's Lounges are located on the second floor.

THE SCIENCE BUILDING, also completed in 1889, houses the Departments of Physics and Chemistry.

THE LIBRARY BUILDING, completed in 1903, marked a departure from the style of the older buildings. Its design, which has been followed in all of the later University buildings, is a modern adaptation of the Gothic, using brick as the construction material.

The original building, at the corner of Main and Downing Streets, was enlarged in 1910 by the addition of a wing extending along Main Street. Part of this wing is used for library purposes and it houses the Graduate School of Geography, the President's office and the offices of University Development and Public Relations. A second addition to provide for the growing book collections was added to the library in 1939. This is in the form of a tower which connects the Library Building with Atwood Hall.

ATWOOD HALL has its entrance on Woodland Street and extends along Downing Street to join the library tower. It provides an auditorium with a seating capacity of 800, which is used for weekly college assemblies and other university functions.

THE ALUMNI GYMNASIUM, completed in 1938, is at the corner of Main and Maywood Streets. It provides a playing floor of ample size with seats for 800 spectators. The Gymnasium also contains the offices of the Alumni Secretary and a comfortable lounge which provides a convenient and attractive meeting place for University organizations.

ESTABROOK HALL, at the corner of Woodland and Charlotte Streets, provides dormitory accommodations for men and contains the University Dining Hall.

WOMEN'S DORMITORIES. There are at present four women's dormitories, Fanning, Blakeslee, Woodland, and Sanford Houses, all located on or adjacent to the campus.

THE STUDENT UNION is a former residence which has been converted into an attractive restaurant and lounge for students and guests. Light meals and snacks are served and there is a complete soda fountain service. The main room also serves as a lounge and dance floor. There are recorded music and television facilities. It is located on the Downing Street hill west of Woodland Street.

The Library

Tilton M. Barron, *Librarian*

Marion Henderson, *Reference Librarian*

Catherine B. Carpenter, *Cataloger*

Guy Burnham, *Map Librarian*

Clark University Library contains over 213,000 volumes and a collection of some 50,000 maps and charts housed in a well-equipped building providing ample, well-lighted work areas for students and researchers.

The various collections that make up the library reflect the history and academic growth of the university. The early library was primarily a scholar's collection, serving the needs of the first faculty assembled by President G. Stanley Hall.

Jonas G. Clark, founder of the university, gave his private library of books and paintings to the university library and also provided a fund for its maintenance and enlargement. A room has been set aside for the display of this collection.

With the founding of Clark College in 1902 an undergraduate library was established. Both libraries are now combined.

The richest collections are in the fields in which graduate work is offered—geography, psychology, biology, chemistry, physics, mathematics, economics, history and international relations. Characteristically undergraduate in content are the collections dealing with music, fine arts, language, literature, religion and philosophy.

President Hall directed the assembling of words on psychology and also bequeathed his personal library to the university. These volumes form one of the best in the nation for material pertaining to the period of his activity, especially in child psychology. It is particularly rich in early prints of foreign journals.

With the establishment of the School of Geography at Clark under President Wallace W. Atwood, a noteworthy collection of books, maps and charts was assembled. In 1928 this collection was further enlarged by the bequest of the fine private geographic library of Colonel William Libbey of Princeton, N. J. A full-time cartographer is a member of the library staff.

The "open stack" system is used in the library to permit the widest freedom for individual research and browsing. Only certain rare books and maps and frequently used reference material are on reserve.

A music library of recordings contains a collection of most classical and standard musical works and there is a listening room equipped with a phonograph.

A language center is a special feature of the library. The comfortably furnished room serves as a practice area for those who desire to increase their proficiency in speaking and reading a foreign language. There is a tape recorder for the recording and analysis of speaking ability. A collection of foreign newspapers and periodicals serves to increase reading skill and to acquaint the student with the contemporary culture of the foreign lands. The university's many foreign students are frequent visitors to the center.

Clark University Library coordinates its acquisition of new material and exchanges material with other libraries in the area.

Placement Bureau

The University maintains a Placement Bureau, with offices in Jonas Clark Hall, for the purpose of providing employment information to seniors, graduate students, and alumni. Students seeking employment after graduation are urged to register with the Bureau during the fall of their last year of residence.

Credentials which the student places on file should be as complete as possible and carefully prepared since they may be used over an indefinite period to supply information to employers. The Bureau makes available up-to-date information about job openings and schedules interviews between students and representatives of employing firms.

Students who want part-time employment are also invited to make use of the Bureau's services.

The University Dining Hall

The University Dining Hall is operated for the convenience of all students and the staff of the University.

Undergraduates who do not live at home are required to eat at the Dining Hall. Other members of the University are welcomed on a permanent or temporary basis or for single meals.

Attractive and well-balanced meals are served at a price which is fixed to cover only the cost to the University.

Fellowships, Scholarships and Loans

Fellowships and scholarships are provided by the University from endowed funds and from other sources. Pecuniary aid to students is available also in the form of grants from a number of special funds. A limited amount of part-time employment is available in the various offices and departments of the University. Frequently, as in the case of departmental assistants, this is of a kind which yields useful experience.

Loans for educational purposes are available from a number of funds which have been created for this purpose. Loans are made to undergraduate students at an annual interest rate of 4%. It is expected that all borrowers will begin repayment of loans shortly after graduation. Additional information is given in the undergraduate colleges announcement.

Many scholarships and educational loans are provided by local sources in communities throughout the nation. Any interested person should address inquiries to school officials, churches, fraternal organizations, chambers of commerce, etc.

Detailed statements and lists of the individual funds may be found in the announcements of "The Graduate Schools" and "The Colleges."

Admission

Four classes of students are accepted in the University:

1. GRADUATE STUDENTS, candidates for the degrees of Master of Arts, Master of Arts in Education, and Doctor of Philosophy.
See the announcements of the graduate schools.

2. UNDERGRADUATES, candidates for the degrees of Bachelor of Arts and Bachelor of Business Administration in the Men's College or the Women's College.

3. SPECIAL STUDENTS, persons not prospective candidates for a degree, who wish to take advantage of the opportunities for study provided by the University and who give satisfactory evidence of adequate preparation for the work which they wish to undertake.
Special students are under the supervision of the College Board.

4. Students in the Summer School and in the Evening College who may or may not be candidates for a degree in Clark University.

AUDITORS may be admitted at the discretion of the administrative officers of the University. They pay the regular tuition charges but are not enrolled as students in the University and do not pay the matriculation fee.

The University reserves the right to require the withdrawal at any time of any student whose record in either conduct or scholarship fails to meet the expectations implied by his admission.

Inquiries concerning admission should be addressed to the following officers:

Undergraduate colleges: **The Director of Admissions.**
Graduate schools: **The Secretary of the Graduate Board.**
The summer school: **The Director of Summer School.**
The evening college: **The Director of the Evening College.**

CLARK UNIVERSITY
WORCESTER 10, MASS.

Tuition and General Charges

Tuition and general charges which apply generally throughout the university are listed on the chart. Special fees of the School of Geography are listed in the school's announcement.

Application or Matriculation Fee. The application fee must accompany the application for admission to the university. The fee is not returnable. If the applicant is subsequently enrolled at the university the application fee is used to cover the matriculation fee.

Tuition. Tuition is established on the basis of a student's participation in a normal academic program of four or five courses per year, September to June. Students who enroll for less than the normal program pay tuition on a course basis of approximately one-fifth the normal fee.

All tuition and general charges are due and payable on or before the first day of each semester.

Activity Fee. This fee is paid by all students to cover the cost of certain extra-curricular activities and services. It covers admission to varsity athletic events, subscription to the student newspaper and certain other approved student programs.

Health Service and Infirmary Fee—The cost of these services are included in the general tuition and are no longer paid separately.

Laboratory and Deposit Fees—These special fees are due and payable on or before the first day of each semester.

Matriculation or Application Fee		$ 5.00
Tuition:		
Full program (4 or 5 courses)	$350.00 per Sem.	$700.00 per Yr.
Per course	70.00 per Sem.	140.00 per Yr.

UNDERGRADUATE COLLEGES

Activity Fee		$ 15.00 per Yr.
Induction Fee		25.00
Diploma Fee (paid senior year)		5.00
Dining Hall	$190.00 per Sem.	$380.00 per Yr.

Dormitories:

Deposit Fee	$ 25.00
Key Deposit (Men only)	1.00
Room Rent (Women)	$105.00 to $150.00 per Sem.
Room Rent (Men)	$ 90.00 to $120.00 per Sem.

Laboratory Fees:

Physics, Biology, Geology, Psychology and Chemistry II	$ 10.00 per Sem.
Chemistry Laboratory (except Chemistry II)	$ 15.00 per Sem.

Laboratory Deposits (for breakage & Supplies):

Chemistry Courses except Organic	$ 10.00 per Yr.
Organic Chemistry only	20.00 per Yr.

GRADUATE SCHOOL

Diploma Fee (Master's Degree)	$ 5.00
Publications Fee (Master's Degree)	10.00
Diploma Fee (Doctor's Degree)	25.00
Publications for (Doctor's Degree)	30.00

MISCELLANEOUS FEES

Fees for late registration $1.00 per day to maximum	$ 5.00
Fee for late payment of tuition	5.00

The Graduate School

GENERAL INFORMATION

Clark University was initially established as one of America's first institutions dedicated exclusively to graduate study and research. Its faculty and graduates have endowed the University with an impressive record of accomplishments through the years.

Today, the University continues to devote fervent emphasis to graduate education by offering to both men and women special facilities and advanced instruction required for independent study and research.

Programs leading to the degrees of Master of Arts and Doctor of Philosophy are available to qualified holders of a bachelor's degree or other orders of equal attainment.

MASTER OF ARTS degrees are offered in the fields of chemistry, mathematics, physics, economics, history, government, international relations, geography, sociology, psychology, biology and education.

DOCTOR OF PHILOSOPHY degrees are available in chemistry, economics, history, international relations, geography and psychology.

Departments which are not at present organized to accept candidates for graduate degrees, do offer numerous courses, not listed above, which are suitable for inclusion in a program of graduate study.

Financial aid through scholarships and fellowships are available to candidates for the graduate degrees and are listed at the end of this section. Additional information peculiar to the Graduate School of Geography is contained in the next section of the catalogue.

Correspondence concerning the Graduate School should be addressed to:

The Secretary of the Graduate Board,
Clark University,
Worcester 10, Massachusetts.

ADMISSION TO THE GRADUATE SCHOOL

Admission to the Graduate School may be granted only by the Graduate board on the recommendation of a department of the University. Admission does not imply admission to candidacy for a degree.

Application. A prospective applicant should communicate with the department in which he expects to do his major work. If he is encouraged by the department to make application, he will be provided with application blanks. These should be returned to the chairman of the department with an official transcript of undergraduate work, and letters of recommendation from at least two persons who are competent to judge the applicant's qualifications.

In addition, applicants for admission to the graduate school are strongly urged, and may be required, to submit a record of attainment in the Graduate Record Examination, given by the Educational Testing Service, Princeton, New Jersey.

For earnest consideration, applications for both admission and for financial aid should be completed not later than March 1 if the applicant intends to begin the studies in September. However, applications may be submitted at any time throughout the year and periodically are considered by the Graduate Board.

Admission. In granting admission, the Graduate Board may, with the advice of the department, prescribe a minimum period of residence, never less than one year, and other definite requirements, including courses in particular subjects, as prerequisites for a graduate degree.

Admission to the Graduate School is granted for entry only at a specified time, and lapses if the student fails to enter at that time. If, after an applicant has entered the University as a regular student, his period of graduate study is broken by more than a year, he must make formal application for reinstatement.

Admission of college seniors to graduate courses. Seniors in the Men's College or the Women's College who rank in the upper third of the senior class may, in exceptional cases, be admitted to courses "primarily for graduate students" provided petitions for admission are approved by the College Board and the Secretary of the Graduate Board.

THE DEGREE OF MASTER OF ARTS

An academic year of full-time study in residence, or its strict equivalent in summer sessions and part-time study, is a minimum requirement for a master's degree. Residence study is broadly defined as graduate work done at Clark University under the immediate personal supervision of at least one member of the university faculty.

A reading knowledge of a foreign language, usually French or German, may be required of candidates for the degree of Master of Arts at the discretion of the major department.

Application for admission to candidacy for a master's degree should be filed with the Secretary of the Graduate Board not later than the first week of the last full semester which the student expects to spend in residence as a candidate for this degree.

Applications will be considered by the Graduate Board when the student has:

1. Completed one semester of full-time graduate work or its equivalent in residence at this university;
2. Obtained the written endorsement of his major department;
3. Paid the diploma fee ($5) and publication fee ($10).

Candidacy for the degree of Master of Arts holds good for three years from the date of admission to candidacy. For satisfactory reasons, candidacy may be extended once for an additional period of three years by vote of the Graduate Board. If the candidacy expires without the degree having been awarded, the diploma and publication fees, less any expenses incurred, are returned.

Course requirements. Each student must meet a minimum course requirement of five courses, or their equivalent in half courses. The program must be approved by the major department. One of the courses may be a research course devoted to the preparation of the thesis.

Thesis. The thesis will be written on a topic in the field of the student's special interest under the supervision of a member of his major department. A copy of the thesis, a précis of it, approved by the supervising instructor, and an academic history page must be deposited in the Registrar's office not later than three weeks before the date of the Commencement at which the degree is to be conferred. A second copy of the thesis, with a copy of the précis must be delivered to the major department. The précis must not exceed seventy-five words in length.

The thesis is deposited by the Registrar in the University Library. The précis is printed by the University in an annual publication.

Each candidate must make a satisfactory record in such written examinations as may be required by the major department, and in a final oral examination by a committee of three or more, two of whom must be members of the Graduate Board.

THE DEGREE OF MASTER OF ARTS IN EDUCATION

The residence, candidacy, course, and examination requirements are basically the same as those listed above for the Master of Arts.

Thesis. Students may choose one of the following options, subject to the approval of the Department of Education:

(1) Prepare a thesis or special report, as required for the M. A.

(2) Elect two additional semester courses in subject matter fields.

(3) Elect a two-semester, or double, seminar in which papers are prepared and presented to fellow students and staff.

For further particulars, see the announcement of the Department of Education.

THE DEGREE OF DOCTOR OF PHILOSOPHY

Only such candidates as give evidence of general proficiency, power of investigation, and high attainments in the special fields in which their major subjects lie will be encouraged to proceed to the degree of Doctor of Philosophy.

Residence. The minimum requirement is one year of full-time study, or its equivalent in part-time work, in residence, broadly defined as graduate work done at Clark University under the immediate supervision of at least one member of the University faculty.

If the M. A. has been earned at Clark, this requirement is an addition to the residence requirement for that degree. For the Ph.D. degree, four courses, or the equivalent in half-courses, is normally a full-time program.

Requirements in foreign languages. A prospective candidate for the doctor's degree is advised to prepare himself early for the examinations in the reading of modern foreign languages. Usually the student must pass two language examinations. French and German are normally required; but the Graduate Board may authorize the substitution of another language for one of these, and a student's major department may require additional languages.

A department, under special circumstances and with the approval of the Graduate Board, may permit a student to substitute the following for the usual language requirements: (1) The passing of an examination in either French or German and in addition, certification by the department that the candidate has demonstrated a working knowledge of the language in the departmental program; (2) the satisfactory completion of an additional program of studies in a field related to the major program.

The language examinations are conducted by a committee composed of representatives of the modern language departments and a representative of the student's major department. The results of the language examinations are reported to the Registrar by the language committee; the results of the substitute requirements are reported by the department. A student must fulfill the above requirements before he will be permitted to take the preliminary examination for the degree of Doctor of Philosophy.

Foreign students whose native tongue is not English may petition the Graduate Board, subject to the approval of the department concerned, to omit either French or German if both languages are not necessary for the field of concentration.

Admission to candidacy. Applications for admission to candidacy must be filed not later than November first in any academic year, by students who hope to receive the degree at the end of that academic year.

An application for admission to candidacy will be considered by the Graduate Board when the applicant has:

1. Completed two full academic years of graduate work (or its equivalent in part-time work), one of which must be at Clark University;
2. Passed the required examinations in foreign languages, or completed satisfactorily the substitute program;
3. Passed a preliminary examination in his chosen fields of study;
4. Obtained the written endorsement of his major department;
5. Paid the diploma fee ($25) and publication fee ($30).

Candidacy for the degree of Doctor of Philosophy holds good for three years from the date of admission to candidacy. For satisfactory reasons, candidacy may be extended once for an additional period of three years by vote of the Graduate Board. If candidacy expires without the degree having been awarded, the diploma fee and publication fee, less any expenses incurred, are returned.

Dissertation. A dissertation which is expected to make an original contribution to some special field of knowledge is required of each candidate.

The dissertation, approved by the chief instructor, is laid before the examining committee at the final oral examination.

An abstract of the dissertation, not exceeding 600 words in length, and a précis, not exceeding 75 words, both approved by the instructor under whom they were written, are also required.

Not later than four weeks before Commencement Day at which the degree is to be conferred the first, or ribbon, copy of the dissertation, together with two official title pages, an academic history page, the first copy of the abstract and of the précis, each in a form prescribed, must be delivered to the Registrar of the University. At the same time a second copy of the dissertation and of the abstract may be required by the major department.

The Registrar deposits the dissertation and the abstract in the University Library where they remain permanently. A microfilm copy of each dissertation is made by University Microfilms, Incorporated, of Ann Arbor, Michigan, and is available for duplication by them on request. The abstract is printed in *Dissertation Abstracts,* which is widely distributed both in this country and abroad to subscribing libraries and leading abstracting services. The précis is printed in an annual publication by the University.

Final examination. The final examination is oral and lasts for at least two hours; additional written examinations may be given if the major department so directs. The candidate is expected to defend his dissertation and at the discretion of the examining committee, may be questioned on the entire special field of his study. The oral examination is conducted by a committee of at least four members, including the chairman and one other member of the major department, a member of the Graduate Board under whom the candidate has done no work (unless such a member has participated in the preliminary examination of the candidate), and such other members of the Graduate

Board as may be duly appointed. The president of the University is authorized to invite any person from within or without the University to be present and to assist in the examination.

GRADUATE FELLOWSHIPS, SCHOLARSHIPS AND ASSISTANTSHIPS

Graduate fellowships and scholarships are provided by the University from endowed funds and from other sources. Pecuniary aid to graduate students is available also in the form of grants from a number of special funds. A limited amount of part-time employment is available in the various offices and departments of the University. Frequently, as in the case of departmental assistants this is of a kind which yields useful experience.

Loans for educational purposes are available from a number of loan funds on terms which are stated under the heading *Loans for Graduate Students.*

Both outright grants and loans for educational purposes are provided in many sections of the United States by local foundations, fraternal organizations, civic groups, etc.

Graduate fellowships and scholarships are available for prospective candidates for all Master of Arts and Doctor of Philosophy degrees. Appointments are made on the basis of scholarly promise and seniority and on the recommendation of the departments. The number of appointments available in any department varies from year to year. Fellows and scholars are expected to coöperate with the staffs of the various departments, and may by mutual agreement undertake limited responsibilities. They are never called upon to perform services which would interfere with the completion of a full-time program of graduate study.

In a case where assistance in the department, either in research or teaching, is to be a duty of the fellow, an appointment may be designated as a research fellowship or a teaching fellowship. An appointment of this nature is made on the recommendation of the department and with the consent of the applicant.

Application for a scholarship or fellowship to begin in September should be made before March 1 to the chairman of the department in which the applicant expects to do his major work. Applications received late are acted upon periodically by the board. All applications, after endorsement by the department chairman, go to the Graduate Board for final action.

According to an agreement between the members of the Association of American Universities, elections of fellows and scholars will be communicated on April first, but not before, to each successful candidate.

Stipends for graduate fellowships and scholarships are provided by the following funds:

The George Frisbie Hoar Fund, the gift of Andrew Carnegie in honor of the second president of the Board of Trustees.

The Austin S. Garver Fund, a bequest from Austin S. Garver, member of the Board of Trustees from 1908 to 1918.

The Charles H. Thurber Fund, provided by Charles H. Thurber, member of the Board of Trustees from 1913 to 1938 and president of the Board from 1919 to 1937.

The George S. Barton Fund, a bequest from the Honorable George S. Barton of Worcester. The income of this fund is for the benefit of native born citizens of the City of Worcester.

The Alumni Association Fund, provided by alumni who hold the degree of Doctor of Philosophy, is for the benefit of students who are studying for that degree.

Teaching fellowships are available in certain departments. These involve a specified amount of instruction with stipends which vary according to the amount of service agreed upon.

Assistantships are available in several departments. These positions involve a variety of services with stipends to correspond, and usually provide the student with experience which will be useful in his later professional work.

Inquiries concerning any of the above types of appointment should be addressed to the chairman of the department concerned.

AID FOR GRADUATE STUDENTS

Student aid is available from the following funds, with the restrictions noted.

The John White Field Fund established by Mrs. Eliza W. Field to provide for the minor needs of a scholar or fellow.

THE ELIZA D. DODGE FUND. The income of this fund is granted to graduate students of limited means who are engaged in research work.

THE CHESTER BLAND FUND. The income of this fund is preferably used to provide aid to a promising student, either in residence or engaged in research elsewhere under the direction of the department of History, Government and International Relations. It may also be used to defray the expense of visiting lecturers or of departmental research.

THE MORTON L. "SONNY" LAVINE FOUNDATION, a memorial to Lieutenant Lavine of the United States Army, World War II. The income is to be used for the promotion of research in the Department of History, Government and International Relations.

LOANS FOR GRADUATE STUDENTS

Loans are available for graduate students from the funds listed below. These loans bear interest at four per cent per year.

Applications for loans should be made at the office of the Treasurer.

THE MARY S. ROGERS SCHOLARSHIP AND LOAN FUND was established in 1926 for the benefit of students in the Graduate School.

THE SARAH M. THURBER LOAN FUND was established by the late Dr. Charles H. Thurber, former president of the Board of Trustees as a memorial to his mother.

The Graduate School of Geography

Samuel Van Valkenburg, Ph.D., Director of the Graduate School of Geography and Professor of Geography

Raymond E. Murphy, Ph.D., Professor of Economic Geography; Editor, *Economic Geography*

Richard J. Lougee, Ph.D., Professor of Geomorphology

Henry J. Warman, Ph.D., Associate Professor of Geography; Secretary of the Graduate School of Geography

Edward C. Higbee, Ph.D., Associate Professor of Geography

Guy H. Burnham, A.M., Cartographer and Instructor in Geography

Erwin Raisz, Ph.D., Visiting Lecturer on Cartographic Techniques

SPECIAL LECTURERS, 1955-56

George Tatham, Professor of Geography, University of Toronto

Peter Wood, Lecturer, University of Reading

Other lectures to be announced

The Graduate School of Geography offers opportunity to properly qualified students for advanced training in geography. The map collection, libraries, and special laboratories for cartography provide unusual facilities for research work in residence.

The Staff, composed of specialists in their various fields of geography, must spend part of their time in travel and field studies. While in residence, the staff members offer regular courses of instruction and direct advanced students in research work.

Special lecturers, both American and foreign, supplement the regular Staff. Not all courses of instruction are offered each year; many are given in alternate years. All graduate students are encouraged to undertake independent field studies as part of their university work.

GRADUATE WORK IN THE SCHOOL OF GEOGRAPHY

(Please read also the preceding section of this catalogue, under the heading "The Graduate School".)

The degree of Master of Arts

Work is offered leading to the degrees of Master of Arts and Doctor of Philosophy in Geography. Candidates for the master's degree will pass written examinations in at least six of the following fields: physiography, climatology, soils, biogeography, land utilization, economic geography, human geography and cultural geography, regional geography, political geography, and urban geography. The oral examination for the master's degree covers four fields approved by the Staff. The master's degree requires two years except for those whose preparation has been adequate enough in fundamentals to enable them to qualify in less time.

The degree of Doctor of Philosophy

Candidates for the doctor's degree in geography are required to submit superior written examinations, and to pass a general oral examination covering six fields approved by the Staff. This oral examination will be scheduled after language requirements are fulfilled. In general, a year of work beyond the master's degree should prepare a candidate for the general examination preliminary to his acceptance as a candidate for the doctor's degree and to his concentration work for his dissertation. This year of course work may well include, besides certain advanced courses in geography, related advanced studies in other fields.

Theses and dissertations

The master's thesis must be submitted to the major professor at least three weeks before it is to be deposited with the Registrar. This is necessary since theses must rotate among and receive final approval of all staff members. Doctoral dissertations must be submitted at least four weeks before the completed copies are due at the office of the Registrar. Dissertations must be circulated first and then defended. Since the final copy of dissertations is on special thesis paper, it is requested that candidates submit for staff circulation the next-to-final drafts. Such a procedure facilitates changes before the dissertations are typed in final form.

Attention is called to the fact that all dissertations are now reproduced in full on microfilm. Since maps and other graphic devices in color will not reproduce satisfactorily, it is recommended strongly that such features be done in black and white for the master copies of dissertations.

DISTINCTIVE FEATURES

In addition to its location in a natural setting rich in physical attributes worthy of investigation, the Clark University Graduate School of Geography is within easy access of such research centers as Harvard and Yale Universities, Boston cultural centers and the American Geographical Society in New York.

The Clark Graduate School has become a traditional "port of call" for most professors of geography in this and other countries. Their stays have ranged from one hour to as long as six months or a year. Clark graduate students are invited to, and do, visit with these leaders in the field of geography.

The graduate students are assigned desks and shelves in the Geography Workroom on the first floor. Staff offices are located on the floor immediately above; hence conferences are easily and frequently arranged. Both workroom and classroom have immediate connections with the periodical room and the open shelves of the library. A general conference room where visiting professors are made welcome and where seminars are held is located on the first floor in the Libbey Library.

Each year the workroom group elects its own officers. Management of the workroom activities and publication of *The Monadnock,* which has kept Clark Geography alumni in their many and widespread occupations informed for over thirty years, is the responsibility of the workroom officers.

The professional magazine, *Economic Geography,* is edited by a staff member. Launched at Clark University over a quarter of a century ago, it is the only magazine published in English that specializes in the economic phases of geography.

An outstanding feature of the Graduate School of Geography is the field camp of three weeks' duration at the beginning of the fall term. All resident prospective candidates for graduate degrees in geography are expected to attend the field camp each autumn. The field program includes studies in physiography, land utilization, urban geography and weather, with special training in mapping and other field techniques. Following the return to the campus, about ten days are allowed for the completion of field reports. Formal course work begins on the second Monday after the close of the field camp.

Formal course work in geography ends about May 1st, leaving students free to read and to coordinate their work prior to the examination period.

The Alpha Sigma Chapter of Gamma Theta Upsilon, national geography fraternity, provides professional and social affiliations between graduate and undergraduate geography majors.

SPECIALIZATION

There are certain basic courses that everyone takes, particularly prospective candidates for the master's degree. However, with the increasing complexity of world problems it has become impossible for anyone to be proficient in all phases of geography. Realizing this, candidates for the Doctor's degree are encouraged to specialize. The selection of the specialty depends upon the interests of the student, his choice of courses, and the topic for his dissertation.

STUDENTS' FEES

All geography students in residence must pay, in addition to the general university fees, the camp fee, the workroom fee, and the classroom-materials fee.

The camp fee, determined on a cost basis, varies between $50 and $80, payable to the camp director on or before the first day of camp. The camp fee covers in addition to tuition, board and lodging, transportation, maps, drafting supplies, and the use of meteorological instruments and other equipment for the three weeks' period.

The workroom fee, $5 a semester, is payable to the department November first and March first. It helps to maintain the geography workroom and equipment used by graduate students—alcove desks, files of maps, card catalogue, adding machine, darkroom facilities, drafting tables, and instruments.

The classroom fee, $5 a semester, is payable to the department November first and March first. It is for mimeographing and for the maintenance, in part, of the classroom wall maps and other equipment.

The Undergraduate Colleges

The Colleges
  Admission
  Induction and Registration
  Student Programs
  Requirements for a Bachelor's Degree
  Grades and Examinations
  Honors
  General College Regulations
  Fees and Expenses
  Student Activities
  Scholarships and Loans

The Men's College

The Women's College

The Division of Business Administration

The Undergraduate Colleges

The Men's College, established in 1902, and the Women's College, established in 1942, constitute the undergraduate colleges in Clark University. Financially the two colleges are independent, educationally they operate as a unit.

Requirements for admission and for a degree are identical in the two colleges. The colleges offer educational programs in the field of liberal arts and in the professional field of Business Administration.

The liberal arts program emphasizes breadth of training through requirements in each of the principal areas of human culture combined with the intellectual discipline resulting from a moderate degree of concentration in some selected field of special interest. The program, including the offerings made in cooperation with the Worcester Art Museum, possesses a large degree of flexibility permitting adaptation to a wide variety of individual interests. This program leads to the degree of Bachelor of Arts.

The program in business administration is designed to give a training suitable for those who will occupy positions of responsibility in the fields of commerce and industry. A moderate degree of specialization in some field of administration is combined with broad consideration of the principles and techniques of modern business and of the interrelations between business and the society within which it operates. This program leads to the degree of Bachelor of Business Administration.

The Division of Business Administration is the agency which supervises the college program in business administration.

A program leading to the degree of Bachelor of Arts in which the essentials of a liberal education are combined with sound professional foundations in art is offered in cooperation with the Worcester Art Museum. Details of this program are given in the announcement of the Department of Fine Arts.

Information which is of interest to all students in the colleges is given in the succeeding pages, followed by separate announcements of the Men's College, the Women's College and the Division of Business Administration.

Admission

Inquiries concerning admission and requests for blank forms should be addressed to

The Director of Admissions,
Clark University,
Worcester 10, Mass.

Formal application for admission should be made at the earliest possible date.

Each application should be accompanied by the scholastic record of the applicant, and a fee of five dollars. The fee becomes the university "matriculation fee" if the applicant is accepted. It is not returned if he is not accepted. Each application should also include the names and addresses of three responsible persons who are qualified to give information regarding the character and personality of the applicant.

ADMISSION TO THE FRESHMAN CLASS

An application for admission to the freshman class should, if possible, be presented not later than the middle of the applicant's last year in the preparatory school.

The completion of a four-year high school course or its equivalent, including fifteen acceptable units of credit, is normally required for admission to the undergraduate colleges. The term "unit" is understood to mean approximately one quarter of a pupil's normal program for the school year.

An applicant must furnish official records from all preparatory schools which he or she has attended.

All applicants for admission must take the Scholastic Aptitude Test of the College Entrance Examination Board. This test may be taken in December, January, or March of the applicant's senior year in preparatory school. Applicants may also be required to take the Achievement Tests of the College Entrance Examination Board at the discretion of the Admissions Committee. The Achievement Tests should usually be taken in March of the Applicant's senior high school year.

A bulletin of information concerning these examinations may be obtained without charge from the College Entrance Examination Board, P. O. Box 592, Princeton, New Jersey, or, for the far west, from P. O. Box 9896, Los Feliz Station, Los Angeles 27, California.

The subject matter requirements for admission to the freshman class are as follows:

For the Degree of Bachelor of Arts

Required subjects, 7 units

English (four years)	3 units
**Mathematics* (algebra and geometry)	2 units
†*Foreign language* (in one language)	2 units

Restricted electives, 5 or more units in addition to the required units

Mathematics	1 or 2 units
‡*Foreign language*	1 to 4 units
Social sciences (history, government, civics, economics, etc.)	1 to 3 units
Natural sciences (physics, chemistry, biology, etc.)	1 to 3 units

Free electives, not more than 3 units

Subjects recognized by the applicant's preparatory school in its regular program, at the discretion of the Committee on Admissions.

For the Degree of Bachelor of Business Administration

Required subjects, 8 units

English (four years)	3 units
Mathematics (algebra)	1 unit
†*Foreign language* (in one language)	2 units
Social studies	2 units

Elective subjects, 7 units

Subjects recognized by the applicant's preparatory school in its regular program, at the discretion of the Committee on Admissions.

As many as three of these units may be in "commercial subjects."

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*Applicants expecting to specialize in science are advised to present at least three units of mathematics.

†Normally required.

‡A single "beginning unit" in a foreign language is not recognized as an acceptable unit.

Scholastic Quality Requirements. In addition to the Scholastic Aptitude Test of the College Entrance Examination Board, "certification" by the principal of the preparatory school in at least thirteen of the fifteen required units is normally necessary for admission without achievement examinations. An exception may be made if the applicant ranks in the upper quarter of the class with which he graduated.

ADMISSION WITH ADVANCED STANDING

A student who wishes to enter the college after attending another institution of college grade is required to submit a letter of honorable dismissal, a complete transcript of his, or her, academic record at the institution last attended, and such other information as the Committee on Admissions may request. If admitted, the applicant will be provisionally classified as a freshman, sophomore, junior, or senior and will be permitted to register for a program of studies corresponding to this classification. After a semester in residence with a satisfactory record, appropriate credit for courses of college grade which have been completed elsewhere will be recorded.

A graduate of the three year course of the Worcester Art Museum School may be admitted as a candidate for the degree of Bachelor of Arts with the rank of *junior* in the college. In such cases the usual admission requirements must be met and the general subject-matter requirements of the colleges must be satisfied.

The bachelor's degree will not be conferred upon a student until he has spent at least a year in residence at Clark University, and usually not unless the period of residence includes the two semesters immediately preceding the granting of the degree.

ADMISSION OF SPECIAL STUDENTS

Applicants for admission as special students should address their inquiries to the Dean of Men and should be prepared to supply evidence of qualification for the study which they wish to undertake.

Induction and Registration

INDUCTION PERIOD

All freshmen, both men and women, and all upper-class women who are entering the University for the first time meet for a few days preceding the opening of the academic year in September for an induction period.

FACULTY ADVISERS

When a student is admitted to either the Men's College or to the Women's College he or she is assigned to a member of the faculty who advises the student in respect to a program of courses and other matters. At the beginning of the freshman year the advisers are chosen from a limited group of freshman advisers. Later each student is encouraged to select an adviser of his or her own choosing. A change of advisers may be made on formal request addressed to the Dean.

The adviser assists the student in choosing his program of studies and is available at all times for consultation on any matter which the student may wish to discuss with him. Ideally the adviser-student relationship develops into a relationship of mutual regard which frequently endures long after the college course has been completed.

REGISTRATION

Each student is required to register for a detailed program of courses at the beginning of every semester. Official notice is given well in advance of the dates on which registration is required. Failure to register within the period designated involves a charge of one dollar for each day's delay up to a maximum of five dollars.

Changes in registration may be made, with the approval of the student's adviser, for a limited time after the end of the registration period. Later changes involve a formal petition to the College Board.

After the first four weeks of any semester withdrawal from a course normally involves a record of "failure" in the course. An exception to this regulation is made in cases where the withdrawal reduces the student's program from six courses to five.

Student Programs

An undergraduate student normally carries a program of five courses throughout the academic year, September to June, in addition to required physical training. In general it is expected that a course meeting three times weekly will require a minimum of two hours of preparation for each lecture or recitation. Laboratory periods are usually three hours in length.

A student carrying the regular program should, therefore, expect his college work to require from forty-five to fifty hours of his time per week, in addition to the time required for physical training.

College regulations are designed to permit a large degree of freedom in the adjustment of programs of study to individual differences of interest. Even in the freshman year, when the program is largely determined by the degree for which the student is enrolled, each student makes certain individual choices where alternative requirements or free electives are involved. Such choices deserve the most careful consideration since they frequently affect the general pattern of a student's program for the entire four years of the college course.

FRESHMAN PROGRAMS

A freshman must choose his entire program from courses designated as "open to freshmen."

The following programs are required in the freshman year:

For the Degree of Bachelor of Arts

1. *English 11,* Composition and Literature.
2. *A course in a foreign language.*
3. *A course in "Group A,"* science and mathematics.
4. *A course in "Group B,"* social sciences.
5. *An elective.*

   Mathematics 11 must be elected by students who expect to choose a major in Group A. This includes both pre-medical and pre-dental students.

For the Degree of Bachelor of Business Administration

1. *English 11a.* Composition. First semester.
   Business Administration 14b, Business English. Second semester.
2. *Business Administration 10a,* Elements of Distribution. First semester.
   Business Administration 10b, Elements of Production. Second semester.
3. *Business Administration 117,* Principles of Accounting.
4. *Business Administration 13,* Business Mathematics.
5. *An elective.*

SOPHOMORE PROGRAMS

A sophomore must give priority in his program to any subject requirements which remain to be satisfied and should provide for an introduction to the field or subject in which a "major" or an "integrated program" will be chosen. The remaining elective choices provide the opportunity for each student to broaden the range of his interests.

The selection of a major subject is required of candidates for the degree of Bachelor of Arts at the time of registering for the sophomore year.

Sophomores may elect any course designated by a number beginning with the numeral 1, indicating "primarily for undergraduates"; they are not admitted to courses "for advanced undergraduates and graduate students," designated by numbers beginning with the numeral 2.

JUNIOR AND SENIOR PROGRAMS

Programs for the junior and senior years should be planned as a unit. This brings the entire college course under scrutiny; concentration, balance and diversity can be seen in relation to each other and adjusted to desired proportions; the inevitable choices between desirable courses, since all cannot be included in the program, can be made and costly mistakes due to haste and the overlooking of important facts can be avoided. Failure so to plan may result in the omission of important courses because of conflicts in the schedule or the alternation of courses in successive years. The requirement of a comprehensive examination should be constantly kept in mind.

The selection of an "area of concentration" is required of each candidate for the degree of Bachelor of Business Administration before the beginning of the junior year.

Juniors and seniors may elect any courses "primarily for undergraduates" or for "advanced undergraduates and graduate students" subject to any conditions stated in the descriptions of the courses. Under special conditions and with the approval of the College Board and of the Secretary of the Graduate Board in each case, seniors who rank in the upper third of their class may be admitted to courses "primarily for graduate students" designated by numbers beginning with the numeral 3.

ACCELERATED PROGRAMS

At least three years of college study in residence is required for a bachelor's degree. A student may earn the degree in this minimum time, or in three and one-half years, if he is prepared to make the additional effort which is required and is able to maintain the required level of scholarship.

Such accelerated programs are possible through a combination of six-course programs during the regular academic year and attendance at summer schools. Credit toward a degree for study at a summer school is granted only when it is officially authorized in advance in each individual case.

To complete the requirements for a bachelor's degree at the end of three years it is necessary for a student to carry a six-course program through all three years and to attend two six-week summer schools. Only students of exceptional ability and in excellent physical condition are advised to undertake such a program. To complete the requirements for a bachelor's degree at the end of three and one-half years it is necessary for a student to accumulate, within that time, credit for two and one-half courses in addition to a regular program. This may be accomplished without attendance at summer school if the student carries a six-course program through two and one-half years. More commonly a student will attend two summer schools and carry a six-course program through three semesters, or attend three summer schools and carry six courses through two semesters.

SIX-COURSE PROGRAMS

A student whose average grade for any semester is C+ or better is permitted to register for a program of six courses for the following semester.

A senior whose graduation within the academic year depends on the completion of a six-course program during that year may register for such a program in either semester if his average grade for the preceding semester is C— or better.

A freshman may normally register for a program of six courses in the first semester of his freshman year. In subsequent semesters he is subject to the regulation stated above.

For tuition charges see "per course" rate given under "Tuition and General Charges."

WASHINGTON SEMESTER PROGRAM

The University participates in the Washington Semester program of the American University at Washington, D. C. Under this program a small number of superior students may be nominated to attend a semester (normally in the junior year) in the study of the United States government in the nation's capital.

This opportunity is particularly, but not exclusively, attractive to students majoring in government, international relations, history, economics and sociology. Full credit for the semester's work is given toward the degree at Clark. Inquiry and application should be made to the Chairman of the College Board.

SMALL PROGRAMS

Under special circumstances programs of fewer than five courses may be permitted. In general no change of status or of obligation is involved when a student's program is reduced to four courses, nor is there any reduction in the charge for tuition.

A student whose program consists of fewer than four courses is designated as a part-time student. Part-time students are excused from the requirement in physical training, are not required to attend the weekly assembly and do not pay the "activities fee".

For tuition charges see "per course" rate under "Tuition and General Charges."

PROGRAMS FOR SPECIAL STUDENTS

Special students register for such programs as they agree upon in consultation with the instructors concerned. They are not required to attend the weekly assembly nor are they subject to a requirement in physical training. Special students who register for programs of four or more courses are required to pay the activities fee; others are not required to pay this fee.

For tuition charges see "per course" rate under "Tuition and General Charges."

Requirements for a Bachelor's Degree

The fields in which instruction is offered in the colleges are classified for administrative purposes in four "groups" as follows:

Group A (Science and Mathematics). Biology, botany, chemistry, experimental psychology, geology, mathematics, physics, and physiology.

Group B (Social Sciences). Economics, education, geography, government, history, international relations, philosophy, psychology, and sociology.

Group C (Language and Literature). Greek, Latin, English, French, German, Russian, Spanish, and an interdepartmental course in language and literature.

Group D (Fine Arts). Art and Music.

All college regulations involving a quantitative statement of credit are expressed in terms of courses.

A course as a unit of credit normally implies three or four class meetings or laboratory exercises per week throughout two semesters and constitutes one-fifth of a student's normal program. Where departments offer fractional courses, these will be combined in reckoning a student's total credit in courses. Students admitted to classes primarily for graduate students receive credit of one-half course per semester irrespective of the number of class meetings.

A student in good standing who completes the requirements for either the degree of Bachelor of Arts or the degree of Bachelor of Business Administration as stated below will be recommended for the corresponding degree unless, in the judgment of the College Board, there is cause for withholding the recommendation.

GENERAL REQUIREMENTS FOR A BACHELOR'S DEGREE

The following requirements, 1 through 5, apply to all candidates for a bachelor's degree.

1. *Residence.* Not less than three academic years of college study in residence. At least one full year and usually the last year before the degree is conferred must be spent at Clark University. A year in residence signifies the satisfactory completion of five year courses at Clark University.
2. *Course requirements.* Twenty courses in addition to required physical training, except in the case of veterans who are eligible for benefits under Public Laws 16 or 346 as amended by Public Law 268, and veterans who are eligible under Public Laws 550 and 894. Such veterans will normally be graduated on the completion of nineteen courses, credit for the twentieth course being granted for military service and miscellaneous training in service.

   A satisfactory scholarship record must be maintained throughout the entire program.
3. *Comprehensive examinations.* Beginning with the Class of 1953, a satisfactory record in a comprehensive examination is required of every candidate for a bachelor's degree in Clark University with the exception of those in the liberal arts program whose majors are in biology, chemistry, German or mathematics.
4. *Physical training.* Three years of physical training, two hours per week. Veterans who have completed the basic training for any branch of military service and those who served in the Mer-

chant Marine are excused from the requirement in physical training.

5. *Assembly.* Attendance at a weekly assembly is required.

Requirements 4 and 5 are in addition to the course requirements as stated above.

In addition to the general requirements 1 through 5, the following special requirements apply to candidates for the degree of Bachelor of Arts and for the degree of Bachelor of Business Administration respectively.

A. Special Requirements for the Degree of Bachelor of Arts.

6A. *A major.* Seven courses.

The major will normally include certain of the courses specified in the following requirements.

7A. *Group A.* Two courses, one in each of two different fields.

8A. *Group B.* Two courses, one in each of two different fields.

9A. *Foreign language.* Minimum, one course.
  a. One course in the freshman year.
  b. One course at or beyond the level of a third year college course.

10A. *English.* One and one-half courses.
  a. English 11. In the freshman year.
  b. An additional half-course in English.
  c. Satisfactory proficiency in the use of English.

11A. *Fine Arts.* A half-course in Fine Arts or Music or a year course in a foreign civilization.

NOTES ON SPECIAL REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ARTS

6A. Majors.

A departmental major consists of seven courses designated by the department for this purpose. Four or five of these must be courses in the major subject; the remaining courses must lie in fields of study closely related to the major subject.

For the completion of an acceptable major at least eleven of the fourteen semester grades involved must be higher than C—.

Mathematics 11 is a requirement in the freshman year for a student who intends to major in Group A, including pre-dental and pre-medical students. This course may, with the approval of the major department, be included in the seven courses constituting the major.

Students majoring in Group C who have not offered at least two units of Greek or Latin for admission are required to take a year's course in either classical civilization or elementary Greek or Latin. The course satisfying this requirement may, with the approval of the major department, be included in the seven courses constituting the major. The choice between "civilization" and language is subject to the approval of the major department. If a language course is chosen, this requirement should normally be satisfied during the freshman year.

An interdepartmental major includes eight or more courses chosen with regard to related content and purpose in fields which cross departmental boundaries. Two such programs are now available. These will be found fully outlined in the alphabetical list of "Departments and Courses."

7A. Group A.

The two courses may not be distributed between more than two fields of study. One of them *must* be a laboratory course.

Courses in the history of the sciences are not counted toward the fulfillment of this requirement.

8A. Group B.

The two courses may not be distributed between more than two fields of study.

9A. Foreign Language.

Requirements (a) and (b) may both be satisfied by a single course taken in the freshman year.

Students whose previous education has been largely in a language other than English are relieved of the requirement in foreign language upon the completion of English 11.

11A. Fine Arts.

The requirement may be satisfied by a half-course chosen from the following list: Fine Arts 11, 12b, 191a, 192a; Music 12, 13, 14; or by a year course: French 113, German 141, or Greek 123a and Latin 123b.

B. Special Requirements for the Degree of Bachelor of Business Administration.

6B. *An "integrated program"* of ten courses.
  This program will normally include the courses specified in the following requirements.

7B. *Business Administration,* three courses.
  a. Business Administration 10a, Elements of Distribution and 10b, Elements of Production. In the freshman year.
  b. Business Administration 18, Business Organization and Finance.
  c. Business Administration 220, Analysis of Business Problems.

8B. *Economics,* two courses.
  a. Economics 11, Principles of Economics.
  b. Economics 13, Money and Banking.

9B. *Government,* one course.
  Government 15, Introduction to Government.

10B. *Business Law,* one course.
  Business Administration 20.

11B. *Business Mathematics,* one course.
  Business Administration 13. In the freshman year.

12B. *Accounting,* one course.
  Business Administration 117, Principles of Accounting. In the freshman year.

13B. *Statistics,* one course.
  Business Administration 16, Business Statistics.

14B. *English,* one and one-half courses.
  a. English 11a, Composition; Business Administration 14b, Business English. In the freshman year.
  b. Business Administration 17a, Public Speaking. A half-course.

NOTES ON SPECIAL REQUIREMENTS FOR THE DEGREE OF BACHELOR OF BUSINESS ADMINISTRATION

6B. The Integrated Program.

This program is based on the choice of a "field of special interest" within the general area of business administration and must be submitted to the student's faculty adviser at the end of the sophomore year. Ordinarily a program will not be approved unless it includes, in addition to the required courses which are listed above, at least five courses in Business Administration or closely related subjects.

Typical areas of concentration for integrated programs are:

Accounting

- Intermediate Accounting
- Cost Accounting
- Auditing
- Advanced Accounting
- Industrial Management
- Federal Tax Accounting

Management

- Cost Accounting
- Analysis of Business Problems
- Industrial Relations
- Industrial Management
- Techniques of Managerial Control
- Industrial Psychology

Finance

Business Organization and Finance
Money and Banking
Public Finance
Business Cycles
Analysis of Business Problems

Foreign Trade

Principles of Marketing
International Economics
Economic Geography
Industrial Psychology
A foreign language

Marketing

Elements of Distribution
Salesmanship
Advertising
Marketing Research
Sales Management
Retailing Principles

Personnel Management

Industrial Psychology
Personnel Management
Industrial Management
Industrial Relations
Labor Problems

8B.

Under special conditions Economics 13 may be replaced by certain other courses in economics.

Grades and Examinations

GRADES

At the end of each semester grades are reported for each student in each course in terms of A, excellent; B, good; C, average; D, poor; F, failure. The modifying symbols plus (+) and minus (—) are used with each of these letter grades with the exception of F, giving twelve levels of passing grades. A report of "incomplete" is permitted only when severe sickness or some other equally unavoidable circumstance prevents the completion of a course.

A record of "failure" in a course is final and not subject to change on the basis of any subsequent performance of the student who is involved. Credit for a course in which a failure has been reported may be secured only by repeating the course and earning a passing grade.

SCHOLARSHIP STANDARDS

Courses with the grades of D+, D or D— may not be counted toward a bachelor's degree beyond one-quarter of the total credit required; i.e., not more than five (5) such courses, or their equivalent in fractional courses, may be counted. In the administration of this regulation only grades received and credit earned in Clark University are considered. If grades are not available for some of the twenty courses required for the degree, the maximum credit which may be counted with grades of D+, D or D— is reduced to one-quarter of the total credit from all courses in which grades are available.

Classification of students. A student continues to be listed in the class with which he or she entered college until the end of the third, or junior, year. At this time only those students who have credit for at least fourteen courses with a minimum of eighteen semester grades of C— or better are promoted to the senior class.

Probation. Students with unsatisfactory grades are placed on probation. Failure of a student to remove himself from probation after two consecutive terms or three non-consecutive terms normally results in separation from college.

EXAMINATIONS

Final examinations are regularly given at the end of each semester in all college courses. Approximately two weeks are set aside for each examination period and an attempt is made to distribute the examinations for any individual student throughout this period. Absence from a final examination, except for the most compelling reasons, usually results in a record of failure in the course.

Other examinations and tests may be given at any time during the semester at the convenience of the instructors.

COMPREHENSIVE EXAMINATIONS

"Comprehensive examinations" in a student's major subject are given in the spring of the senior year. These examinations test the student's grasp of the subject as a whole and do not duplicate the individual course examinations. They are designed to determine whether the student has achieved a reasonable integration of the subject matter which has been presented in the separate courses.

"Comprehensive examinations" consist of at least four hours of written work plus a possible oral or laboratory examination. Students who do not pass the comprehensive examinations will be entitled to one re-examination during the following academic year, but no student will be given a third examination except by express permission of the College Board.

Comprehensive examinations are not required at present in the departments of biology, chemistry, German or mathematics.

Honors

The colleges award "annual honors" to outstanding students in each of the four classes, and grant the bachelor's degree "with honor" to students who maintain a praiseworthy level of scholarship throughout the college course. The degree is also granted with honors in a particular field of study to students who have qualified for this distinction under the rules of the colleges.

Additional recognition of outstanding scholarship was the function of the Clark Scholarship Society from its founding in 1914 until 1952. Scholarly attainment in the area of the "liberal studies" is now the major concern of the Clark chapter of the Society of Phi Beta Kappa.

ANNUAL HONORS

First honors and *second honors* are awarded at the end of each year to members of the freshman, sophomore, junior and senior classes who have, in the judgment of the College Board, distinguished themselves by their scholarship during the year.

COURSE HONORS

The bachelor's degree is awarded *with honor, with high honor* and *with highest honor* to members of each graduating class whose records, in the judgment of the College Board, warrant this distinction.

DEPARTMENTAL HONORS

A program leading to the degree of Bachelor of Arts *with honors in a particular subject,* may be undertaken by a student at the beginning of the junior year if his cumulative scholarship average places him among the highest third of his class. Under this plan a student in cooperation with his honors' adviser organizes the work of his junior and senior years into a unified program which may include a maximum of two "honors courses." In these he works with a considerable measure of independence under the supervision of the adviser. In the senior year each candidate must pass satisfactorily a comprehensive examination given by his major department.

Application for honors work should be made, in writing, to the major department not later than the first day of May of the sophomore year.

Admission to candidacy for departmental honors does not relieve a student from any of the standing regulations of the college except as specifically stated above. If a student's candidacy for honors is terminated for any reason, the amount of credit, if any, to be allowed for special honors courses will be determined by the College Board in consultation with the major department.

An honors student must withdraw from his candidacy at the end of any semester in which he has not maintained a standing for the semester in the upper half of his class.

THE CLARK SCHOLARSHIP SOCIETY

The Clark Scholarship Society was organized in 1914 and was made temporarily inactive in June 1953. This change, effected by the executive committee of the society, was considered advisable as a result of the installation of a chapter of Phi Beta Kappa at Clark in 1953. At a meeting on June 6, 1954 it was voted to make the Clark Scholarship Society an alumni organization. Dr. Theodore Nicol was elected president and Mrs. Michael T. Neary, secretary-treasurer.

PHI BETA KAPPA

The Society of Phi Beta Kappa, founded at the College of William and Mary in 1776, is dedicated to the recognition and encouragement of outstanding scholarly achievement in liberal studies—those studies concerned principally with a knowledge, understanding, or appreciation of the natural and social world in which we live. The Society establishes chapters in colleges and universities throughout the United States where the curricula are broadly cultural in scope and where high standards of scholarship are maintained.

In harmony with the underlying purposes of the Society, the Clark chapter, Lambda of Massachusetts, established in 1953, seeks to foster among undergraduates an appreciation of the contributions to culture and civilization which have been made by liberal studies.

Each year the Chapter elects to membership a limited number of juniors and seniors whose programs have been definitely liberal in character and who have achieved distinction in scholarship.

General College Regulations

ATTENDANCE

Students are expected to be present on the first day of each term and to continue in attendance from day to day to the end of the term.

Attendance at a weekly college assembly is required, except in the case of part time and special students.

Regulations applying to absences from scheduled class meetings and laboratory exercises are based upon the conviction that such absences, regardless of their cause, involve a loss to the student and a drag upon the class. Students are, accordingly, expected to be consistently regular in attendance. Subject to this general provision, students are given a considerable degree of freedom in the control of their attendance. It is expected that such freedom will not be abused, and that it will contribute to the growth of each student's sense of responsibility.

Special regulations apply to attendance at the weekly assembly and physical training.

PHYSICAL TRAINING

Regular physical exercise is required of all students, with the exception of veterans, for the general promotion of their health and mental efficiency. Physical training is scheduled at times which avoid conflict with recitation hours. Students are usually excused from this requirement only on the recommendation of the medical director.

DINING HALL

Undergraduates who do not live in their own homes are required to board at the Dining Hall. This fact must be recognized and subscribed to by all who seek admission to either the Men's College or the Women's College.

DORMITORIES

Freshman men not living in their own homes or with near relatives are required to room in Estabrook Hall.

Women students who do not live in their own homes or with near relatives are required to room in one of the Women's Dormitories.

For further details see the announcements of the Men's College and the Women's College.

INFIRMARY

The Infirmary, located at 6 Downing Street, opposite the University Library, is open during the academic year. A nurse is in attendance and the University physicians are on call. Facilities are provided for the treatment of emergencies and for minor medical services to all students while they are on the campus; in addition there is provision for the temporary hospitalization of resident students in cases of more serious illness.

For the use of the Infirmary as outlined above and for annual physical examinations supplemented by other auxiliary health services a fee is collected with the tuition in the case of all undergraduates.

Student Activities

Student life at Clark is, as would be expected at a small institution, friendly and informal. Fixed rules and regulations are few, the assumption being that students will conform to the recognized standards of morality, good order, and consideration for others. College activities are under the minimum degree of faculty oversight which is necessary to insure responsibility in business dealings and consideration of the welfare of the individual student and of the college community.

The Activities Fee. Athletics and several non-athletic activities are partially supported by an activities fee. This fee admits a student, without additional charge, to all athletic contests held on the college grounds, provides him with the college newspaper, and admits him to plays and concerts presented by the dramatic and musical clubs.

Activities. The programs in athletics are described in the sections dealing with the Men's College and the Women's College.

Opportunities for recreation are found in dramatic clubs and musical clubs, under expert direction; in editing and publishing the college newspaper (*The Clark Scarlet*), the literary magazine (*Helicon*), and the senior yearbook (*Pasticcio*); also in such organizations as the Debating Council and International Relations Club.

Formal "proms", informal "Bohemes" and fraternity activities furnish further opportunities for social life. One of the University buildings houses the Student Union. For many students, the most prized opportunity for social contacts is in the offices and laboratories, where members of the faculty may be visited with ease and freedom.

Eligibility for Non-competitive Activities. All students may participate so long as their scholarship proves satisfactory. Details are published in the Students' Handbook.

Scholarships and Loans

Undergraduate scholarships are provided by the University from endowed funds and from other sources. A limited amount of part-time employment is provided by the Library, the Dining Hall and various University offices. Educational loans are available from funds which have been established for this purpose.

Many scholarships and other forms of pecuniary aid for college students are provided in Worcester and elsewhere throughout the United States by local sources. Any interested person should address inquiries to school officials, churches, fraternal organizations, chambers of commerce, etc.

SCHOLARSHIPS

Undergraduate scholarships are generally awarded on the basis of pecuniary need with due regard to character and ability. The scholarships vary in amount and are in some cases restricted to residents of a definite locality or to those studying particular subjects.

To be eligible for a scholarship, an entering freshman must have a scholastic record which places him in the upper third of his preparatory school class. A college student is eligible if he has secured a rank in the upper half of his class for the preceding semester.

Scholarships are awarded at the beginning of each semester. Ordinarily an award for the first semester is continued through the second semester if the holder maintains a position in the upper half of his class for the first semester.

Applications for undergraduate scholarships should be filed at an early date on forms which may be secured from the college office.

Aid given in the form of scholarships is not regarded as a loan. It is recognized, however, that those who receive such aid may wish to return the amount in later years. Funds for scholarship purposes are much needed and greatly appreciated.

The following scholarships are currently available to students in the undergraduate colleges with the restrictions noted.

The Ellis-Hubley Competitive Scholarships. These are competitive scholarships restricted to male residents of Worcester who have graduated from Worcester secondary schools. The stipends, $700 annually to each beneficiary, are provided by money set aside from the income of funds bequeathed in memory of Gordon A. Hubley, Clark 1910, and of Theodore T. and Mary G. Ellis. One appointment is made each year to a member of the freshman class and the award is normally continued throughout the four years of the college course.

A candidate must receive the recommendation of the Principal or Head Master of the school in which his preparation for college is completed, before his application can be considered. Two full tuition scholarships are awarded annually to applicants who, in the judgment of the Committee on Scholarships, stand next below the successful applicant.

The Jonas G. Clark Scholarships. These scholarships have been established by the trustees to provide either full tuition or half tuition for undergraduate male and female students from outside of Worcester.

The Theodore T. and Mary G. Ellis Scholarships. These scholarships provide either full tuition or half tuition for male or female residents of Worcester who are students in "the collegiate department of Clark University."

The Sanford Memorial Scholarship. The Sanford Memorial Fund was established by alumni of the University in honor of Edmund C. Sanford, president of Clark College from 1909 to 1920. The Fund provides an annual scholarship amounting at present to approximately $200 for a male senior undergraduate.

The Livermore and Ambulance Scholarship. The endowment for this scholarship was provided by citizens of Worcester in honor of Charles Randall Livermore, the first Clark man to fall in battle in the first World War, and of his companions in the Clark Unit of Ambulance Drivers. Fifty dollars or more is awarded annually on the basis of academic success, character, and usefulness to the college. This scholarship is for male undergraduate students who are residents of Worcester County.

The Henry A. Willis Scholarships. Male students from Fitchburg, Massachusetts, and vicinity have first consideration in the award of these scholarships. In the absence of suitable candidates from this community grants may be made to others.

The Helen Brewster Randolph Memorial Scholarship. A fund, established by the late Professor Charles B. Randolph in memory of his mother, provides about $250 annually for scholarships restricted to male college students, preferably those whose major is a foreign language.

The Gordon A. Hubley Scholarships. These scholarships are provided by a fund which was bequeathed by Alice B. Hubley in memory of her son, a graduate of the college in the class of 1910. The income is for the assistance of male undergraduates who are residents of Worcester.

The Alice Friend Newton Memorial Scholarship. This scholarship provides full tuition for a student in the Women's College whose major is psychology.

The William Richardson Scholarship. This scholarship was established by a bequest of Carlton E. Richardson of the college class of 1908 as a memorial to his father. The income of a fund of $7,500 is available "preferably for the education - - - - of boys of the Protestant faith."

The Jennie L. Richardson Scholarship. This scholarship was established by a bequest of Carlton E. Richardson of the college class of 1908 as a memorial to his mother. The income of a fund of $7,500 is available "preferably for the education - - - - of girls of the Protestant faith."

The Ernest R. Whitman Memorial Alumni Scholarship. The fund, established by the Alumni Association in honor of the Director of Physical Education for Men at Clark College from 1904 until his death in 1948, provides financial aid to men or women students possessing high qualities of leadership.

The B'nai B'rith Scholarship. The Worcester Chapter, Order of B'nai B'rith provides a scholarship which is primarily but not exclusively for the aid of Jewish students.

The Probus Club Scholarship. The Probus Club of Worcester offers an annual scholarship of two hundred dollars.

The Clark University Faculty Women's Club Scholarships. These scholarships are available to undergraduate students, either men or women, who rank high in intellectual and personal qualities.

The Clark University Alumnae Association Scholarships. Two scholarships are customarily offered by the Alumnae Association to students in the Women's College.

The National Council of Jewish Women Scholarship. The Worcester Section, National Council of Jewish Women, awards a $200 scholarship each year to a Jewish girl from Worcester or Worcester county who is attending Clark University.

The Soroptimists Club Scholarship. The Soroptimists Club of Worcester provides an annual scholarship for a student in the Women's College.

The Pleiades Scholarship. The women's senior honor society, Pleiades, raises, each year, a considerable sum of money which it applies to scholarships for students in the Women's College.

The Aaron Fuchs Memorial Scholarship Fund, given by Mrs. Celia Fuchs in memory of her husband and in honor of her sons Lawrence and Jerome Fox of the classes of 1944 and 1953 respectively, provides scholarship aid for non-residents of Worcester or of Worcester County. Awards under this fund are made by the Scholarship Committee.

EDUCATIONAL LOANS

Loans are available for undergraduate students from the funds listed below. These loans bear interest at the rate of 4% per year. Applications for loans should be made at the office of the Treasurer.

The Alumni Loan Fund was established by the trustees and the alumni.

The Estabrook Loan Fund was created by the generosity of the late Arthur F. Estabrook of the Board of Trustees.

The Haskell Talamo Loan Fund has been established by relatives and friends of the late Doctor Haskell Talamo, A.B., Clark University, 1916.

The Louis N. Wilson Fund, established by the first librarian of Clark University, is a loan fund for male students in the college.

The Men's College

Clark College

The Collegiate Department of Clark University, popularly known as Clark College, was established in 1902. Originally attendance was restricted to men and a three-year program led to the degree of Bachelor of Arts. In 1922 the normal period of residence for the bachelor's degree was extended to four years, in 1941 a second program leading to the degree of Bachelor of Business Administration was introduced and in 1942 women were admitted to college classes.

The establishment of the financially independent Women's College made possible an enrichment of the undergraduate curriculum through an agreement under which men and women attend the same classes and the two colleges share the costs of administration and instruction.

FRESHMAN INDUCTION PERIOD

The freshman class of the Men's College assembles a few days before the beginning of the academic year in September for an "induction period." During this period the members of the class become acquainted and meet a selected group of upper class students as well as members of the college staff. Formal activities include tests which assist in placing a student in the proper class sections, individual and group conferences and registration for a program of studies.

It has been customary to spend the induction period at some well-equipped camp where there are ample facilities for recreation.

THE MEN'S DORMITORY — ESTABROOK HALL

Freshman men who do not live in their own homes are required to room in the freshman dormitory, Estabrook Hall.

Occasionally there may be accommodations in the dormitory which are not required for freshmen. In such cases these accommodations may be rented by upperclassmen.

Rooms are assigned to freshmen in order of application, when the application is accompanied by the deposit of fee. Students who indicate a desire for a room together will be accommodated whenever possible.

This deposit is returned, less a charge for lights and for any damages to the room or its furnishings, after the key to the room is surrendered to the Bursar.

THE MEN'S SENIOR HONOR SOCIETY, GRYPHON

The men's senior honor society, Gryphon, selects each year from the junior class a group of outstanding men who constitute the membership of the society for the following year. The society plays an important part in campus life and in maintaining the traditions of the college. Among its regular functions are the supervision of the annual "rope pull" between the freshman and the sophomore classes and the management of "Spring Spree Day."

ATHLETICS

Students in the Men's College have the opportunity to participate in intercollegiate soccer, baseball, tennis, basketball, golf and crew. Competent coaches have immediate supervision over the athletic teams. In addition to the program in intercollegiate athletics there is an extensive program of intra-mural sports.

Eligibility for Competitive Activities. Participation in organized extracurricular competitive activities is denied only when a student's scholastic record indicates that continuance in an activity might be responsible for scholastic failure.

Any student carrying less than a full program of studies is ineligible unless his reduced program permits graduation at the end of the year in which that program is carried.

Students admitted with advanced standing from another college are ineligible during the first half-semester of residence at Clark College.

A special student is normally not entitled to participate in competitive activities of the college. The College Board may, however, permit such participation in the case of a special student who is enrolled for a program of five courses.

General supervision of the athletics program is vested in the Committee on Athletics, consisting of the Directors of Physical Education, the faculty Committee on Athletics, and the Athletic Council.

The Women's College

The Women's College of Clark University was established in the fall of 1942. Its financial basis is entirely distinct from that of the Men's College although it shares, through a cooperative arrangement, the services of the same administrative and teaching staffs.

Women attend the same classes as men and are subject to the same requirements for admission and for graduation with the exception of a required course in physical education.

General supervision of women students rests with the Dean of Women, Miss M. Hazel Hughes.

The Advisory Board for the Women's College assists the administration in respect to general policy and social affairs.

Advisory Board for the Women's College

Mrs. Myles Morgan,
Chairman
Mrs. Robert S. Bowditch,
Secretary
Mrs. Laurens C. Seelye
Miss Alice F. Sheehan
Mrs. John Griefen
Mrs. Howard B. Jefferson,
honorary member

Mrs. Roger S. Greene,
Vice-Chairman
Mrs. George L. Stout
Mrs. Forrest E. Alexander
Mrs. Erwin C. Miller
Mrs. Oliver Powell
Miss Marian G. Cruikshank
Miss M. Hazel Hughes,
Dean of Women

Representing the Alumnae

Mrs. Gerald R. Anderson,
chairman
Miss Marion M. McCann

Miss Gladys H. Hague,
president ex-officio

Representing the Faculty Women's Club

Mrs. James A. Maxwell,
chairman
Mrs. William H. Carter

Mrs. F. Eugene Melder
Mrs. George H. Hargest,
president ex-officio

The center for women's activities on the campus is the Women's Lounge, located on the main floor of Jonas G. Clark Hall. Attractively decorated and comfortably furnished, the lounge provides a meeting place for formal or informal groups and in general serves the comfort and convenience of women students.

The Women's Gymnasium with its connected dressing rooms and shower rooms occupies the western end of the ground floor of Jonas G. Clark Hall. Here are located also a second lounging room and a lunch room.

INDUCTION PERIOD

The freshman class of the Women's College and all women transfer students assemble at the college on Tuesday before the opening of the academic year in September for an "induction period." During this period the new students become acquainted and meet a selected group of upper class students as well as members of the college staff. Formal activities include certain tests which assist in placing students in the proper class sections, individual and group conferences and registration for a program of studies.

It has been customary to spend the induction period at some attractive and well-equipped girls' camp or summer hotel where there are ample facilities for recreation.

DORMITORIES

Undergraduate women who do not live at home are expected to live in one of the women's dormitories. Other arrangements are permitted only on written request from a parent or guardian and the consent of the Dean of Women.

There are four dormitories, each housing from fifteen to twenty-six students. Each has its house mother and a dormitory committee which meets with the house mother to consider matters pertaining to dormitory living such as house meetings, the social life of the dormitory, the observance of dormitory regulations, etc. These groups also act as advisory boards for the students with whom they are associated.

A Dormitory Council composed of representatives from the four houses, the four house mothers and the Dean of Women meets once a month to discuss matters of interest to the dormitory residents. This board often appoints student committees to make surveys in particular areas of student life.

Rooms are assigned to freshmen when the application is accompanied by the deposit fee.

This deposit is returned, less a charge for lights and for any damages to the room or its furnishings.

Students who indicate a desire for a room together will be accommodated whenever possible.

THE WOMEN'S SENIOR HONOR SOCIETY, PLEIADES

The women's senior honor society, Pleiades, selects each year from the junior class a group of outstanding women who constitute the membership of the society for the following year. The society plays an important part in campus life and in maintaining the traditions of the college. In recent years it has provided funds for scholarship aid to one or more women students.

PHYSICAL EDUCATION AND ATHLETICS

There is a physical education program for women which is designed to improve posture and general health. Every student is given a physical examination at the beginning of each year.

Attendance at classes in physical education is required on the basis of two periods per week for three years. Body mechanics and one of the rhythmic activities is required during the three years. Participation in one group sport and one individual sport is required. Folk dancing, square dancing and modern dancing are also offered. Swimming and life saving courses are available through the entire year by arrangements with the Young Women's Christian Association. These courses are conducted by a member of the physical education staff of the University.

Several types of athletics are open to women. Offered in the fall and spring are hockey, crew, archery, tennis, fencing, and golf. Tournaments are held in the spring and fall and a cup is awarded to the winner of each event. During the winter months basketball is the principal organized athletic activity; volleyball and badminton are also offered. Women students use their own gymnasium for practice, but have the use of the University Gymnasium for games with outside organizations.

The Women's Athletic Association arranges for all sports activities; both within the college and with other colleges in the New England area.

The Division of Business Administration

Eugene J. Kelley, Ph.D., Director of the Division of Business Administration and Associate Professor of Economics and Business Administration.

ADVISORY COMMITTEE TO THE DIVISION OF BUSINESS ADMINISTRATION

NATHAN T. BASCOM, President, Worcester Mechanics Savings Bank
JOHN W. COGHLIN, President, Coghlin Electric Company
HORACE GOOCH, Treasurer, Worcester Moulded Plastics Company
EVERETT W. HICKS, Vice President, Norton Company
FREDERICK W. HOWE, President, Crompton & Knowles Loom Works
H. LADD PLUMLEY, President, State Mutual Life Assurance Company
PAUL W. SPAULDING, President, John C. MacInnes Company

The Division of Business Administration is an integral part of the undergraduate organization of the University. The program is given cooperatively by the Departments of Economics and Sociology, English, Geography, History, Government and International Relations, Mathematics and Psychology.

General supervision of the program rests with the Administrative Committee representing the faculty. An Advisory Committee composed of business executives from the Worcester area assists in the formulation of general policies.

THE BUSINESS ADMINISTRATION PROGRAM

The program leading to the degree of Bachelor of Business Administration is designed to prepare young men and women for careers in business.

Students who enroll in this program are members of either the Men's College or of the Women's College and are subject to the general college regulations as well as to the special requirements for the degree of Bachelor of Business Administration. They may choose their electives in other fields such as social studies, language, fine arts and science.

The business program is designed to provide an opportunity for the student to become acquainted with the basic characteristics of modern industry and commerce, to acquire an understanding of the general principles of business and to receive training in the techniques common to all successful business enterprises. It should assist the student in adapting himself to general business requirements and in relating his specific job to the entirety of business and industrial enterprise as well as in perfecting his skill in particular techniques.

The program consists of carefully selected courses in arts and sciences together with specialized courses of particular interest to students of business. Among the former are basic courses in English composition, mathematics, economics, psychology, and government. Among the latter are courses in accounting, finance, managerial techniques, statistical methods, merchandising, and business law. Training in the analysis of administrative problems is emphasized throughout the program.

A uniform program including English, elements of production and distribution, accounting and business mathematics is normally required of all business administration students in the freshman year.

The following courses are required of all candidates for the degree of Bachelor of Business Administration and must be included in the programs covering the sophomore, junior and senior years:

B. A. 16	Business Statistics
B. A. 17a	Public Speaking
B. A. 18	Business Organization and Finance
B. A. 20	Business Law
B. A. 220	Analysis of Business Problems
Economics 11	Principles of Economics
Economics 13	Money and Banking*
Government 15	Introduction to Government

*Under special conditions Economics 13 may be replaced by certain other courses in economics.

At the end of the sophomore year, each candidate for the degree of Bachelor of Business Administration must submit to his faculty adviser an integrated program of studies covering the junior and senior years. This program should indicate the student's areas of special interest and the specific courses he intends to elect. Ordinarily no program will be approved that does not include in addition to the required courses named above, at least five courses in Business Administration or closely related subjects.

Comprehensive examinations. A comprehensive examination is required of every candidate for the degree of Bachelor of Business Administration in the second semester of the senior year. The completion of this examination demands an ability to integrate the principles covered by specialized courses in business administration and economics and a competence in at least one functional field of business administration. Candidates for the bachelor's degree are required to register for Business Administration 220 in the senior year. This course is designed to assist students in preparing themselves for the comprehensive examination.

In addition to the program leading to the degree of Bachelor of Business Administration, the colleges offer a less intensive program in Business Administration leading to the degree of Bachelor of Arts. Students taking this program choose Economics and Sociology as their major department. They must meet all the requirements for the degree of Bachelor of Arts including those in English, fine arts, foreign languages and sciences. First year students should take the normal college program for freshmen and should elect Business Administration 10 for the Group B requirement. The program for the second year should include Business Administration 117 and Economics 11. In the third and fourth years students should elect at least two basic courses in economics, such as Economics 13, 21, 22, 205, or 207, and at least four courses in business administration. The following are recommended: Business Administration 16, 18, 127, 20 and 220.

COURSES IN BUSINESS ADMINISTRATION

Courses in Business Administration are listed with descriptions under "Business Administration" in the alphabetical list of "Departments and Courses."

The following courses may not be counted for credit toward the degree of Bachelor of Arts: Business Administration 13, 14b, 17, 109, 125, 128, 129a, 181a, 182b, 23, 227, 237.

Departments and Courses

Interdepartmental Majors
General Education
Biology
Business Administration
Chemistry
Classics
Economics and Sociology
Education
English
Fine Arts and Music
French
Geography
Geology
German
History, Government, and International Relations
Mathematics
Orientation and Hygiene
Philosophy
Physics
Psychology
Russian
Spanish

Departments and Courses

Departments, important subdivisions of departments and certain interdepartmental groups of courses are listed in the following pages. In general, each entry includes a departmental announcement followed by a list of courses which are offered by the department.

Interdepartmental majors and *General Education* are listed first.

Departments and their subdivisions follow the first two entries in alphabetical order.

Departmental announcements contain important general information, as well as regulations concerning graduate work in the department and statements of the requirements for undergraduate majors.

Courses are, in general, arranged in sequence under each heading so as to progress from the more elementary to the more advanced. Each course is described as it has been given during the current academic year unless an accompanying note states otherwise. Notice is given in all cases where a department plans to alter the content or to omit a course. If a course is not currently given but will be offered at a later date this fact is stated.

The unit of instruction for undergraduates is a "course." A course normally meets for classroom or laboratory exercises three or four times weekly throughout the regular academic year (September to June) and constitutes one-fifth of the normal program for an undergraduate.

Each unit of undergraduate instruction as listed below yields credit for one half-course in each semester unless its value as a fractional course or a multiple course is indicated.

Both semesters of an "indivisible course" must be satisfactorily completed before any credit is given for the course.

Advanced courses, not primarily for undergraduates, are announced with a statement of the number of meetings per week. Courses primarily for graduate students yield full half-course credit in each semester without regard to the number of class meetings.

With the consent of the instructor, a course may be entered at the beginning of either semester.

The fields in which instruction is offered in the colleges are classified for administrative purposes in four "groups" as follows:

GROUP A (Science and Mathematics). Biology, botany, chemistry, experimental psychology, geology, mathematics, physics, and physiology.

GROUP B (Social Sciences). Economics, education, geography, government, history, international relations, philosophy, psychology, and sociology.

GROUP C (Language and Literature). Greek, Latin, English, French, German, Russian, Spanish, and an interdepartmental course in language and literature.

GROUP D (Fine Arts). Art and Music.

Courses are classified under three headings as follows:

1. PRIMARILY FOR UNDERGRADUATES, designated by numbers beginning with the figure "1."

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS, designated by numbers beginning with the figure "2."

3. PRIMARILY FOR GRADUATE STUDENTS, designated by numbers beginning with the figure "3."

Interdepartmental Majors

To provide undergraduate "majors" in certain fields which are intrinsically worthwhile culturally or professionally but which cross departmental boundaries, the Faculty has authorized a group of "interdepartmental majors." These permit a greater breadth of choice than the strictly departmental programs but preserve the unity of content and purpose which is inherent in the concept of a major.

An interdepartmental major includes eight or more required courses.

At present two programs are offered under this plan. These are listed on the opposite page:

I. INTERNATIONAL RELATIONS

Freshman and Sophomore Years

General Educ. 14	Europe and the United States since 1500
Economics 11	Principles of Economics
Geography 10	Principles of Geography

Junior and Senior Years

Government 24	International Relations
Government 240	Seminar in International Relations
Government 241	International Law and Organization
Geography 201	Political Geography
Economics 207	International Economics
Economics	One-half course to be selected

Instructor in charge: Associate Professor Hayden.

II. AMERICAN CIVILIZATION

Freshman Year

General Educ. 14	Europe and the United States since 1500

Sophomore Year

At least two of the following courses:

Government 15	Introduction to Government
Economics 11	Principles of Economics
Sociology 11	Principles of Sociology

Junior and Senior Years

History 230	Social and Intellectual History of the United States
English 111	A Survey of American Literature
History 23	Senior Conference in American Civilization

Two courses chosen from the following list:

Sociology 12a	Cultural Anthropology
Philosophy 12	History of Philosophy
History 232	United States Constitutional History and Law
History 234a	American Diplomatic History
History 235b	The United States in the Twentieth Century
Government 251a	American Political Parties
Sociology 12b	Race and Nationality
Sociology 25	Social Institutions

Alternative courses may be chosen with the approval of the instructor in charge of the program.

Instructor in charge: Associate Professor Campbell.

General Education

Courses in General Education are distinguished from courses which are listed in departmental announcements by viewpoint and tone rather than by content. They aim to develop an understanding of the basic unity of knowledge and thought; to offer the student an opportunity to obtain a core of information and of ideas which will be possessed in common with many of his contemporaries and to stimulate intelligent and critical interest in fields of culture where he has no expectation of attaining professional competence. General Education courses are thus a valuable supplement to pre-professional or pre-vocational education. They may be advantageously used to fulfil the distribution requirements in the natural sciences, the social sciences and language and literature. They are outside the sequence of courses in a student's "major" or "field of special interest" and are essentially without specific prerequisites.

The following courses are classified for administrative purposes in Group A or Group B or Group C. They may be used to meet college requirements wherever a particular Group is specified in the "Freshman Programs" or in the "Requirements for a Bachelor's Degree."

The offerings in General Education are under the supervision of a committee which reports to the Academic Council. The present committee consists of Mr. Bumer, chairman, Mr. Nunnemacher and Mr. Reid.

Courses in General Education

General Education 10. An Introduction to Physical Science. This course covers fundamental and outstanding developments of both classical and modern physics and includes selected topics from chemistry and astronomy. The methods and procedures of science as exemplified by physics are emphasized, and considerable attention is given to historical background and the effect of science on man's thought and life. The laboratory periods are devoted to demonstration, discussion, criticism, and evaluation and to a series of selected experiments which are carried out by the students. No attempt is made to develop special competence in laboratory techniques.

Open to freshmen. Primarily for non-science majors. Classified as a Group A course.

Through the year. M. W. F., 10; Tu., 2. Mr. Roope

General Education 14. Europe and the United States Since 1500. A survey of political, economic and intellectual trends since the Renaissance, designed to promote an understanding of the origin and development of the problems of the modern world.

The first semester treats the sixteenth, seventeenth and eighteenth centuries; the second semester, the nineteenth and twentieth centuries.

A class fee of one dollar for each member of the class is charged for supplies and duplicate library copies of books.

Open to freshmen. Classified as a Group B course.

Through the year. Tu. Th., 9; F., 1.

First semester: Mr. Jordan and Mr. Raeff
Assisted by Mr. Pavia
Second semester: Mr. Campbell assisted by Mr. Miller

General Education 17. Great English and American Writers. Unlike the conventional survey course which tries to present a comprehensive view of English literature from *Beowulf* to the present, this course focuses the attention on six or seven major writers in each semester.

The emphasis is placed, not on tracing literary movements or on studying literary problems *per se,* but on showing what these great figures have to say that is of interest or importance to the general reader today. The course seeks to determine the attitude toward life of each author, to see what gave rise to that attitude, and to evaluate it and compare it with the views of other writers treated in the course. Chronology as well as other purely factual material is kept to a minimum.

Meets requirement for a third semester of English in addition to English 11. Open to sophomores, juniors and seniors.

Divisible course. Either semester may be elected separately. Classified as a Group C course.

Through the year. M. W. F., 10 MR. CARTER first semester
MR. ANDERSON, second semester

In 1955-56 only G. E. 17b was offered.

General Education 18. Literature and the Nature of Man. This course is designed to serve the general student by providing him with an opportunity to investigate ideas held by outstanding literary artists of the Western World concerning the nature of man and his relation to the universe. The works are also to be studied as representative of the cultures of which they are products.

The course is planned not only to introduce the student to a body of knowledge and experience held in common by educated men and women in our society, but also to help him to clarify his thinking concerning certain basic problems and to develop attitudes that are both humane and creative.

The subject matter undertaken includes Sophocles' *Antigone,* the *Book of Job,* the *Inferno* from Dante's *Divine Comedy,* Shakespeare's *Hamlet,* Milton's *Paradise Lost,* Molière's *Misanthrope,* Goethe's *Faust, Part I,* and selected poems of T. S. Eliot. All non-English works are read in translation.

Meets the requirement for a third semester of English in addition to English 11, but not the requirement in Fine Arts. Classified as a Group C course.

Open to sophomores, juniors, and seniors with the consent of the instructors.

Divisible course. Successful completion of first semester is normally required for admission to second semester.

Through the year. M. W. F., 11. Mr. Anderson, first semester
Mr. King, second semester

General Education 110. Fundamental Concepts of Elementary Mathematics. The subject matter of this course is exposed in terms comprehensible to students with no formal training in mathematics at the college level. It is hoped that the course will show the student how the abstract and general ideas of mathematics have implications for other fields of learning.

Open to juniors and seniors only. Classified as a Group A course.

Through the year. M. W. F., 10. Mr. Bumer

Omitted in 1955-56.

General Education 143. The Theater in Western Civilization. An analysis of the theater as an art form as it is developed by specific cultural periods of the civilization of the West. Attention is paid to the contribution of other art forms to its growth and to the effect of intellectual and sociological trends on its content. The course has two aims: to give the student of the drama an insight into the technical aspects of theater and the problems facing the producer and designer, and to give the student of the theater an insight into the cultural background which has produced the drama.

First semester: Greek Theater; Mediaeval and Elizabethan Theater.

Second semester: The Age of the Baroque; Nineteenth Century and Modern Theater.

Open to upperclassmen with the consent of the instructor.

This course does not meet the requirement for a third semester of English, nor the requirement in Fine Arts. Classified as a Group C course.

Divisible course. Either semester may be elected separately.
Through the year. MR. EDWARDS
Omitted 1954-55.

American Civilization

AN INTERDEPARTMENTAL MAJOR

An "interdepartmental major" in the field of American Civilization is offered to candidates for the degree of Bachelor of Arts. The program required for the completion of this major is fully outlined under the earlier heading *Interdepartmental Majors.*

Department of Biology

PROFESSOR POTTER, PROFESSOR NUNNEMACHER
ASSISTANT PROFESSOR MACCHI, RESEARCH ASSOCIATE GATES

The biological laboratories are well equipped for the courses offered and contain special equipment for advanced investigations. Funds are available annually for the purchase and building of apparatus which may be required. The university library contains complete files of the more important periodicals and reference works. The department maintains an herbarium of over 50,000 sheets. Certain assistantships, fellowships and scholarships are available from time to time.

UNDERGRADUATE WORK

Biology 11 presents a comprehensive view which is prerequisite to all other courses in the department, except Biology 19a.

An undergraduate majoring in biology must complete Biology 11 and three advanced courses in biology, Chemistry 11, Physics 11, Mathematics 11, and at least one additional course in chemistry, physics or geology. Mathematics 11 does not count towards the fulfillment of the major requirements.

A candidate for honors in biology must take Biology 11, 12, 14 and 240.

THE PRE-MEDICAL PROGRAM

Clark University is justly proud of its pre-medical training program. Not only do our better students have little difficulty in entering the best medical schools, but they usually rank in the upper half of their medical school classes and become respected and outstanding physicians.

The student entering upon the pre-medical program must be prepared to compete with other college students of above-average ability; he must be of good health and capable of sustained hard work; he must like and get along well with all kinds of people and he must have a real desire to help the sick and advance the science of medicine. The pre-medical student must be prepared to undertake a program of intensive study which usually takes eight years before the medical degree can be obtained. During this time the large amount of class and laboratory work reduces considerably the opportunities for earning money through outside work.

While the requirements for the Bachelor of Arts degree assure each graduate familiarity with several fields of learning, the pre-medical student should take as many non-science courses as possible to round out his general education, because medical school programs leave no time for courses outside of their technical field. Courses in psychology and human relations will be of particular benefit.

The field of medicine is open equally to men and women.

The following programs are recommended for pre-medical students with a major in biology. Program A places the emphasis on biology; Program B places the emphasis on chemistry.

PROGRAM A	**PROGRAM B**
First Year	*First Year*
English	English
Foreign Language	Foreign Language
Mathematics	Mathematics
General Biology	General Chemistry
Group B (one course)	Group B (one course)
Second Year	*Second Year*
Biology 12	Chemistry 13
General Chemistry	General Biology
Foreign Language	Foreign Language
Group B (one course)	Mathematics 12
½ course in English and ½ course in Fine Arts	

Third Year
- Biology (two advanced courses)
- Chemistry 13
- Physics 11
- Two electives

Fourth Year
- Biology 240
- Chemistry 17 and 170
- Three electives

Third Year
- Chemistry 17 and 170
- Biology 12
- Physics 11
- Group B (one course)
- One elective

Fourth Year
- Chemistry 19
- Biology (two advanced courses)
- ½ course in English and ½ course in Fine Arts
- One elective

GRADUATE WORK

Students whose records are approved by the department may be admitted by the Graduate Board for work leading to the degree of Master of Arts.

Courses in Biology

During the academic year 1955-56 the following courses were given: 11, 12, 13, 14, 17, 18, 220, 221, 223b, 240, 242, 245, 260, 261, 300, 320, 340, 350 and 360.

1. PRIMARILY FOR UNDERGRADUATES

11. *General Biology.* An introduction to the fundamental principles and problems of biology.

Divisible course upon approval by the department.

Open to freshmen.

Through the year. M. W. F., 11; M., 2.

Mr. Potter and Mr. Nunnemacher

12. *Comparative Anatomy.* A study of the morphology of the vertebrates from a comparative standpoint which traces the evolution of animals from fish to mammals.

Lectures and laboratory work.

Through the year. M. W., 8; Tu. F., 2. Mr. Nunnemacher

13. *Seminar in General Biology.* Credit is not given for this course. All students in the department are invited to attend and to participate. Staff of the Department

14. *Botany.* First semester, morphology and taxonomy of the lower plants. Special emphasis is given to the algae and fungi.

Second semester, systematic botany of the higher plants with special emphasis on our local flora. A collection of one hundred plants is required, also a spring program of laboratory work in the field of at least three days' duration.

Either semester of the course may be elected separately.

Prerequisite: Biology 11, first semester.

Through the year. T. Th., 10; W. 2. Mr. Potter

15. *Invertebrate Zoology.*
Omitted 1955-56.

17. *General Animal Ecology.* An introductory study of the distribution of animals and the controlling physical factors, animal interrelationships, plant-animal associations and adaptations to such a wide variety of environments as fresh water, the ocean, sand dunes, meadows and woodlands. Mr. Nunnemacher
Offered Summer 1955.

18a. *Genetics.* An introduction to the principles of genetics. Half course. First semester. M. W. F., 9. Mr. Potter

19a. *Human Anatomy and Physiology.* An introductory semester course. Does not require Biology 11 as a prerequisite but requires Biology 11 to be counted towards the Group A requirement. May not be counted toward the fulfillment of the requirements for a major in biology. Three lectures per week.
Omitted 1955-56. Mr. Nunnemacher

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

201. *Advanced Systematic Botany.* Through the year. Three laboratory periods and one lecture per week. Either semester may be taken separately. Mr. Potter
Omitted 1955-56.

202. *Economic Botany.* Omitted 1955-56. Mr. Potter

204b. *Bacteriology.* An introduction to the study of bacteriology. Half course. Second semester. W. F., 11, and two laboratory periods. Mr. Potter

205. *Advanced Genetics.*
Three lectures per week.
Half course. Second semester. Omitted 1955-56 Mr. Potter

219. *Entomology.* Fundamentals of insect life.
Three lectures and one laboratory period per week.
Half course. Second semester. Mr. Potter
Omitted 1955-56.

220a. *Histology.* A comprehensive course dealing with tissue

structure. Emphasis is placed on the study of mammalian tissues. Two lectures and two laboratory periods per week.
Half course. First semester. Tu. Th., 10. Mr. Nunnemacher

221b. *Embryology.* A consideration of the fundamentals of embryology. Two lectures and two laboratory periods per week.
Half course. Second semester. Tu. Th., 10. Mr. Nunnemacher

223b. *Parasitology.* An introduction to the parasitic mode of life of the protozoa, helminthes, and arthropoda and their relation to mankind. Mr. Potter and Mr. Nunnemacher
Half course. Second semester.

224b. *Neuro-anatomy.*
Three lectures per week. Mr. Nunnemacher
Omitted 1955-56.

240. *General Physiology.* Open to students who satisfy the instructor as to their preparation. The principal types of functioning characteristic of living organisms are considered in the light of their physio-chemical determinants.
Through the year. Tu. Th., 10; and two laboratory periods per week. Mr. Macchi

241b. *Endocrinology.* A study of the ductless glands and their relation to behavior.
Half course. Second semester. Mr. Macchi
Omitted 1955-56.

243a. *Circulation and Respiration.* A consideration of theoretical concepts and experimental findings concerning circulation and respiration in mammals.
M. W., 10; 2 Labs Mr. Macchi

244. *Biochemistry.*
First semester. Three lectures per week. Mr. Macchi
Omitted 1955-56.

245. *Manometric Techniques and Cell Respiration.* A consideration of fundamental theories and techniques in manometry as applied to cell respiration.
One lecture and three laboratory periods per week. Time to be arranged. Mr. Macchi

260. *Special Problems.* Advanced semi-independent study of an approved topic under the direction of a member of the staff.
Hours and credit to be arranged. Staff of the Department

261. *Microtechnique.*
Through the year. Mr. Nunnemacher and Mr. Potter

3. PRIMARILY FOR GRADUATE STUDENTS

300. *Readings and Research in Botany.*
Credit to be arranged. MR. POTTER

301b. *Plant Morphology.*
Credit to be arranged. MR. POTTER

320. *Readings and Research in Zoology.*
Credit to be arranged. MR. NUNNEMACHER

340. *Readings and Research in Physiology.*
Credit to be arranged MR. MACCHI
Omitted 1954-55.

350. *Advanced Studies in Biology. Seminar.*
Tues. 4-6. STAFF OF THE DEPARTMENT

360. *Thesis.*
Credit to be arranged. STAFF OF THE DEPARTMENT

Business Administration

ASSOCIATE PROFESSOR HARGEST, ASSOCIATE PROFESSOR MELDER, ASSOCIATE PROFESSOR KELLEY, ASSISTANT PROFESSOR NORDSTROM, LECTURER BREEN, TEACHING FELLOW MONIZ

With the assistance of the staffs of the cooperating departments: Economics and Sociology, English, Geography, History, Mathematics and Psychology.

A description of the program in Business Administration and a statement of the requirements for the degree of Bachelor of Business Administration will be found under the general heading "The Undergraduate Colleges" and the special heading "The Division of Business Administration."

The courses in Business Administration and related subjects which are included in the program for the degree of Bachelor of Business Administration are listed alphabetically in the following pages under the headings: Accounting, Economics, English and Public Speaking, Geography, History and Government, Management, Marketing, Mathematics, Psychology, and Statistics.

Courses in Business Administration

Courses in *Business Administration* are classified as follows:

Course number	Classification	Course number	Classification
10a	Marketing	128	Accounting
10b	Management	129	“
13	Math. and statistics	181	Management
14	English and pub. speaking	182	“
16	Math. and statistics	183	“
17	English and pub. speaking	20	“
18	Management	23	Marketing
109	Marketing	27	“
112	Management	203	“
117	Accounting	227	Accounting
124	Marketing	237	“
125	“	220	Management
127	Accounting		

Students should note that the following courses may not be counted for credit toward the degree of Bachelor of Arts: Business Administration 13, 14b, 17, 109, 125, 128, 129a, 181a, 182b, 23, 227, 237.

ACCOUNTING

Business Administration 117. Principles of Accounting. The organization and use of financial records, with emphasis on their interpretation as well as on the techniques of procedure.

Indivisible course.

Required of freshmen in the Business Administration program.

Through the year. Tu. Th., 8; Tu. Th., 2. Mr. Hargest
Assisted by Mr. Moniz

Business Administration 127. Intermediate Accounting. A study of generally accepted accounting principles and procedures and their application to asset, liability and proprietorship accounts. The analysis of financial statements, including statements from incomplete data and the statement of application of funds. Emphasis is placed upon problem analysis and solution.

This course may be entered at beginning of the second semester, but credit will not be given until both semesters have been completed.

Indivisible course.

Through the year. M. W., 11-12:15. Mr. Hargest

Business Administration 128a. Elementary Cost Accounting. A study of the basic principles of cost accounting and their application

to the job order cost system. Especial consideration is given to the accounting for material, labor and manufacturing expenses and to the preparation of financial statements.
Half course. First semester. T. Th., 10-11:15. Mr. Hargest
Offered in alternate years.

Business Administration 128b. Advanced Cost Accounting. A study of the principles and procedures used in process, estimated and standard cost accounting systems. Consideration is given to the accounting for by-products, joint products and methods of accounting for work in process inventories. The preparation of financial statements and cost reports for managerial control is emphasized.
Half course. Second semester. T. Th., 10-11:15. Mr. Hargest
Offered in alternate years.

Business Administration 129a. Federal Tax Accounting. A basic course in the fundamentals of federal income and social security taxes with major emphasis upon the preparation of returns.
Half course. First semester. Mr. Hargest
Offered in alternate years. Omitted 1955-56.

Business Administration 227a. Auditing. After an analysis of the purpose and scope of the several classes of audits, the course deals with (1) professional ethics (2) auditing standards (3) internal control systems (4) audit procedures applicable to asset, liability and proprietorship accounts, and (5) the use of worksheets and the preparation of statements and reports.
Half course. First semester. Mr. Hargest
Offered in alternate years.

Business Administration 237a. Branches, Consolidations, Mergers and Bankruptcy Accounting. The principles and problems encountered in home office and branch accounting; parent and subsidiary accounting; major-minor and reciprocal holding company relationships; financial and operating statements of consolidated companies; accounting for "sick business"; equity receiverships, statement of affairs; bankruptcy; the statement of realization and liquidation.
Half course. First semester. Mr. Hargest
Omitted 1955-56.

Business Administration 237b. Governmental, Institutional and Estate Accounting. The principles and problems encountered in accounting for the budget, revenues, appropriations and expenditures for the several funds used by governmental units and institutions. Ac-

counts of the executor, administrator or trustee of an estate, and the related charge and discharge statements.
Half course. Second semester. Mr. Hargest
Omitted 1955-56.

ECONOMICS

See also announcement of the Department of Economics and Sociology.

Economics 11. Principles of Economics. Required for the degree of Bachelor of Business Administration.

Economics 13. Money and Banking. Required for the degree of Bachelor of Business Administration.

Economics 15a. Public Finance.

Economics 19b. Economics of National Security.

Economics 140b. Consumer Economics.

Economics 21. Business Cycles.

Economics 22. Labor Economics and Labor Problems.

Economics 25b. Problems in Public Finance.

Economics 26. Government and Industry.

Economics 205a. Intermediate Economic Theory.

Economics 206b. Economics of Industry.

Economics 207. International Economics.

ENGLISH AND PUBLIC SPEAKING

English 11. Composition and Literature. The first semester is required of freshmen in the Business Administration program.

Business Administration 14b. Business English. A course in English composition designed to train the student in the preparation of reports, letters, etc., used in business.
Required of freshmen in the Business Administration program.
Half course. Second semester. M. W. F., 10 Mr. Illingworth

Business Administration 17a. Public Speaking. A course in the fundamentals of public speaking including the more common speech situations such as speech of introduction, address of welcome, expository and impromptu speeches; problems in human relations; voice tests, vocabulary drill.
Required for the degree of Bachelor of Business Administration.
Half course. First semester. M. W. F., 9. Mr. Illingworth

Business Administration 17b. Public Speaking. Parliamentary procedure, open forum, panel discussion, committee meetings, reports, extemporaneous speaking.

Prerequisite: Business Administration 17a.
Half course. Second semester. M. W. F., 9. Mr. Illingworth

GEOGRAPHY

See also announcement of the Department of Geography

Geography 10. Principles of Geography.

Geography 16. Economic Geography.

HISTORY AND GOVERNMENT

See also announcement of the Department of History and International Relations

Government 15. Introduction to Government.
Required for the degree of Bachelor of Business Administration.
General Education 14. Europe and the United States Since 1500.

MANAGEMENT

Business Administration 10b. Elements of Production. A survey of the production function in business, giving special emphasis to an exposition and theoretical evaluation of current practices in the fields of plant location, building and equipment selection, product and process development, maintenance, and methods of manufacture.

Required of freshmen in the Business Administration program.
Half course. Second semester, M. W. F., 9. Mr. Nordstrom

Business Administration 18. Business Organization and Finance. A course in the financial structure of modern industry with emphasis on the nature of the business corporation, its financial practices, types of securities, capital structure, financial reorganization, and the problems of internal financial control.

Required for the degree of Bachelor of Business Administration.
Through the year. Tu. Th., 10-11:15. Mr. Hund

Business Administration 112. Introduction to Personnel Management. A survey of the policies, practices and theory underlying the management of manpower in Industry. Representative topics studied are employee selection, training, promotion and transfer, wage payment and morale. Research into actual industrial situations is included in the second half.

Through the year. M. W., 11-12:15. Mr. Nordstrom

Business Administration 181a. Industrial Management. A study of the techniques of the executive control of manufacturing operations with special reference to such fields as specialization of labor, simplification and diversification of products, expansion, control of factors of production, and internal organization. The case method is used to a large degree.

Half course. First semester. M. W. F., 10. Mr. Nordstrom

Business Administration 182b. Techniques of Managerial Control. The students in this course have an opportunity to work in group projects, each studying operations in a specific control area. This often involves contact with outside business functions.

Half course. Second semester. M. W. F., 10. Mr. Nordstrom

Business Administration 183. Management-Labor Relations. The subject matter of the course is management-employee relationships with special reference to union and management bargaining. Opportunity for development of perspective and judgment as regards problems of management in shop industrial situations and under the law of labor relations is provided. Discussion and case methods are employed.

Through the year. W. F., 11-12:15. Mr. Melder

Business Administration 20. Business Law. A study of the legal basis of business and the principles of statutory and common law as they affect business relationships; covering such subjects as contracts, property, sales, negotiable instruments and agency.

Indivisible course.

Required for the degree of Bachelor of Business Administration.

Through the year. M. W. F., 8. Mr. Breen

Business Administration 220. Analysis of Business Problems. A course in the analysis of specific problems of administration and policy making. The course is designed to integrate the principles covered in more specialized courses in Business Administration in order that the student may acquire an appreciation of the broad business picture, while developing his ability to view business and economic problems from an over-all standpoint.

Required of seniors in the Business Administration program.

Indivisible course.

Through the year. M. W., 2-3:15. Mr. Kelley

MARKETING

Business Administration 10a. Elements of Distribution. An introduction to the study of business activities involved in the flow of goods and services from producer to consumer. Required of freshmen in the business administration program.

Half course. First semester. M. W. F., 9. MR. KELLEY

Business Administration 109b. Sales Management. A course designed to give the student experience in analyzing sales problems, arriving at practical solutions, and defending these solutions. Sales administration, operation, control, promotion, and policies are studied during the course.

Half course. Second semester. M. W. F., 10. MR. KELLEY
Omitted 1955-56.

Business Administration 125a. Retailing Principles. A survey of the major phases of retailing including discussions of the retailer in our economy, the store and its organization, aspects of buying and selling, operating activities and personnel, and retail control.

Half course. First Semester. M. W. F., 10. MR. KELLEY
Omitted 1955-56.

Business Administration 23a. Advertising. An introduction to the principles and practices of advertising. The emphasis is on the use of advertising as a tool of marketing. Topics studied include the economic functions of advertising, advertising research, media selection, advertising organizations, and testing.

Half course. First semester. M. W. F., 10. MR. KELLEY

Business Administration 23b. Salesmanship. A study of the basic principles and problems of modern salesmanship; functions of sellers, basic knowledge needed in selling, and specialized sales problems.

Half course. Second semester. M. W. F., 10. MR. KELLEY

Business Administration 27a. International Trade and Finance. A study of the nature, theoretical basis, methods of financing and government control of the international movement of goods.

Half course. First semester.
Omitted 1955-56.

Business Administration 203b. Marketing Research. A study of the types of problems faced by business executives in marketing and the ways in which the methods of scientific business research can be utilized for their solution.

Half course. Second semester. M. W. F., 9. MR. KELLEY

MATHEMATICS AND STATISTICS

Business Administration 13. Business Mathematics. An elementary course designed to give the necessary foundation for an understanding of the basic processes involved in business transactions.

Required of freshmen in the Business Administration program.

Through the year. M. W. F., 11. MR. STUBBE

Business Administration 16. Business Statistics. This course is designed to give the student a knowledge of the basic statistical techniques and procedures as these are applied to business and economic data. Lectures and laboratory exercises.

Indivisible Course. Required for the degree of Bachelor of Business Administration.

Through the year. Tu. Th., 9 and Tu., 2.

MR. NORDSTROM AND MR. HARGEST

Mathematics 11. Freshman Mathematics.

Mathematics 17. Mathematical Statistics.

PSYCHOLOGY

See also announcement of Department of Psychology

Psychology 11. General Psychology.

Psychology 190b. Industrial Psychology.

Department of Chemistry

PROFESSOR BULLOCK, PROFESSOR MARTELL, ASSOCIATE PROFESSOR KEGELES, ASSISTANT PROFESSOR SUGIHARA, PROFESSOR AFFILIATE DORFMAN, ASSISTANT PROFESSOR AFFILIATE CHABEREK

Courses in chemistry fall into two groups:

First, those primarily for undergraduates. These furnish a foundation for professional work in chemistry or medicine, and are suitable for students desiring some knowledge of the subject as part of their general education.

Second, those primarily for graduate students.

UNDERGRADUATE WORK

Students who intend to become professional chemists or to study for an advanced degree in chemistry should major in chemistry and take at least two years' work in physics.

They should normally conform closely to the schedule given below.

However, an outstanding student may elect an accelerated program leading to advanced work in the junior and senior years.

REPRESENTATIVE FOUR YEAR CURRICULUM IN CHEMISTRY

First Year

- English 11
- German 11 (or French 11)
- Chemistry 11
- Mathematics 11
- Elective, Group B

Second Year

- Chemistry 13
- Physics 11
- Mathematics 12
- German 12 (or French 12)
- Elective, Groups B, C, or D

Third Year

- Chemistry 17 and 170
- German 13 (or French 14)
- Two of the following:
  - Mathematics 13, Physics 15, Physics 16, Physics 18, Physics 124, French 11 or German 11, Geology, Biochemistry, Biology, Groups B, C, or D.

Fourth Year

- Chemistry 19
- Two full courses from the following list:
  - Chemistry 112b or 116, Chemistry 212b, Chemistry 215, Physics 15, Physics 17, Physics 22, Physics 23, Biology, Mathematics, French 12 or German 12.
- Electives, Group B, C, or D.

A student who satisfies the Department of Chemistry as to outstanding qualifications may elect Chemistry 13, Organic Chemistry, in place of Chemistry 11 in the freshman year. Chemistry 19 is required of all chemistry majors and is essential for work in physiology. Three years of mathematics are recommended as preparation for Chemistry 19 and for graduate work in chemistry. The same amount of mathematics is strongly recommended for all who elect chemistry as a major, and for all who expect to become professional chemists.

For professional work in chemistry, at least one year of graduate study is highly desirable.

Students who consider the possibility of later graduate study in chemistry are advised to secure a reading knowledge of both French and German in order to anticipate the requirements for higher degrees in most graduate schools.

Students who intend to enter the field of secondary education should acquaint themselves with the requirements in "education" of state and local licensing boards and prepare to meet these requirements. This may necessitate the omission of certain elective courses scheduled for the third and fourth years.

In most colleges, premedical students major in chemistry. Program B, outlined in the announcement of the Department of Biology, lists the courses most suited for preparation for all "Class A" medical schools. The special advantage of this program is the inclusion of Chemistry 19 (Physical Chemistry), necessary preparation for physiology.

Attention is called to laboratory fees and breakage deposits listed under the general heading "The Undergraduate Colleges" and the special heading "Fees and Expenses."

GRADUATE WORK

The Department of Chemistry offers advanced courses in the fundamental principles of physical, organic, inorganic, radiochemistry and analytical chemistry, and these are supplemented by specialized courses and research work in physical and organic chemistry and radiochemistry. The graduate program is designed to lead to the degrees of Master of Arts and Doctor of Philosophy. Besides a successful completion of the fundamental courses offered in the graduate school, candidates for both degrees must show facility in conducting a laboratory investigation and a command of the subject which is chosen for the thesis or dissertation.

All graduate students are required to have an adequate reading knowledge of French and German in order to be accepted for candidacy for the Ph.D. degree.

Students registered for advanced degrees are expected to spend not less than eighteen hours per week in the laboratory. This may include special laboratory work in radiochemistry, organic, inorganic, and physical chemistry.

Graduate scholarships and fellowships are available to students in this department. Further information may be obtained from the chairman of the department.

Courses in Chemistry

During the academic year 1955-56 the following courses were given: 11, 13, 17, 19, 116, 170, 212b, 215, 300, 310, 311, 320, 321, 342, 345, 350 and 380.

During the academic year 1956-57 the following courses will be offered: 11, 13, 17, 19, 112b, 116, 170, 212b, 215, 300, 320, 321, 324, 340, 341, 350, 360, 361 and 380.

1. PRIMARILY FOR UNDERGRADUATES

11. *General Chemistry.* Systematic study of the elements and their principal compounds and the fundamental laws and theories of chemistry. Three lectures and three hours of laboratory work per week.

Prerequisite for all other courses in chemistry.

Divisible only by consent of instructor.

Through the year. M. W. F., 11; Tu., 2-5 or Th., 2-5.

MR. MARTELL

13. *Organic Chemistry.* Lectures on the principles of organic chemistry and a laboratory study of the preparation and properties of important organic compounds. Three lectures and three hours of laboratory per week.

Prerequisite: a grade of C—, or better in Chemistry 11.

Through the year. M. W. F., 9; T., 2-5. MR. BULLOCK

17. *Principles of Analytical Chemistry.* Theories and principles of chemistry underlying volumetric and gravimetric analysis as well as more advanced analytical methods. Three lectures per week. Must be taken concurrently with Chemistry 170.

Prerequisites: Chemistry 13, Physics 11.

Through the year. M. W. F., 11. MR. SUGIHARA

19. *Physical Chemistry.* Principles of physical chemistry including gases, liquids, solutions, crystalline solids, chemical thermodynamics, homogeneous and heterogeneous equilibria, electrolytic conductance and transference, electromotive force, reaction kinetics, colloids.

Required for a major in chemistry.

Three hours of lectures and three hours of laboratory per week.

Prerequisites: Chemistry 17, 170, Mathematics 12, Physics 11. Mathematics 13 is strongly recommended.

Through the year. Tu. Th., 10; M., 2; F., 2-5. MR. KEGELES

112b. *Physico-Chemical Methods.* An advanced laboratory course in physical chemistry. Registration limited.

Open to students who have taken or are taking Chemistry 19.

One lecture and six hours of laboratory work per week.

Half course. Omitted 1955-56. Second semester. Tu. Th., 2.

MR. KEGELES

116a. *Organic Qualitative Analysis.* Prerequisite: Chemistry 13. One lecture and six hours of laboratory work per week.
First semester. Tu. Th., 2-5; Th., 1. MR. MARTELL

116b. *Advanced Organic Synthesis.* Prerequisite: Chemistry 13. One lecture and six hours of laboratory work per week.
Second semester. Tu. Th., 2-5; Th., 1. MR. MARTELL

170. *Analytical Chemistry Laboratory.* Must be taken concurrently with Chemistry 17. Volumetric and gravimetric analysis and an introduction to instrumental and other advanced analytical methods. To three-hour laboratory periods per week.
Prerequisites: Chemistry 13, Physics 11.
Half course.
Through the year. M. F., 2-5. MR. SUGIHARA

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

212b. *History of Chemistry.* Outline of historical development of the science, and the relation of chemistry to other sciences at various periods of development. Lectures, collateral reading, reports and thesis.
Open to graduate students and seniors who take or have taken Chemistry 13 and 19 or equivalent courses.
Half course. Second semester. Tu. Th., 11. MR. BULLOCK

215. *Honors Course.* Primarily for candidates for "honors in chemistry." STAFF OF THE DEPARTMENT

All courses listed below are semester courses except 300, 350, and 380, given through the year.

300. *Research* THE STAFF

310. *Molecular Structure.* Theories of electronic structure and relationship between chemical binding and physical properties of various substances. Dipole moments, magnetic properties, bond energies and stereochemistry of organic and inorganic compounds.
First semester. M. W. F., 9. MR. MARTELL

311. *Reaction Mechanisms.* Electronic interpretations of chemical reactions, acid-base concepts and solution catalysis, free-radical and ionic mechanisms.
Second semester. M. W. F., 9. MR. MARTELL
Chemistry 310 and 311 offered together in alternate years.

320. *Advanced Physical Chemistry.* Selected topics in physical chemistry described in detail: introduction to thermodynamics, phase rule, chromatography, electrochemistry, Debye-Hückel theory.
First semester. T. Th., 11. W., 3. MR. KEGELES

321. *Colloid Chemistry.* Osmotic and sedimentation equilibrium. Sedimentation velocity; diffusion.
Second semester. T. Th., 11. W., 3. Mr. Kegeles

322. *Thermodynamics.* Applications of classical thermodynamics to chemical systems.
Omitted 1955-56. Mr. Kegeles

324. *Refractometric Techniques.* Applications of refractometric methods to the study of optically inhomogeneous media. Methodology employed in electrophoresis, ultracentrifugation, diffusion and chromatography.
Second semester. W. F., 10. Mr. Kegeles

330. *Advanced Organic Chemistry.* Effects of functional groups on synthesis. Mr. Bullock

331. *Organic Chemical Reactions.* Lectures on the fundamental reactions in organic chemistry.
Chemistry 330 and 331 offered together in alternate years.
Omitted 1955-56 Mr. Bullock

332, 333. *Heterocyclic Compounds.*
Chemistry 332 and 333 offered together in alternate years.
Through the year. Th. 10. Mr. Bullock

340. *Quantum Chemistry.* Elementary wave mechanics, application to atomic spectra, kinetic theory and statistics, molecular spectra, crystalline solids, imperfect gases and liquids.
Omitted 1955-56. Mr. Sugihara

341. *Advanced Inorganic Chemistry.* Periodic classification of many-electron atoms, chemical and physical properties of atoms and simple ions as functions of electron structure, solid state chemistry, solvents and solution phenomena.
Omitted 1955-56. Mr. Sugihara
Chemistry 340 and 341 offered together in alternate years.

342. *Radiochemistry.* Fundamentals of nuclear physics, including nuclear structure, modes of radioactive decay, interaction of nuclear particles with matter. Radiochemical techniques of production, isolation, and identification of radioactive atoms, introduction to techniques of preparation and measurement of radioelements, applications to problems in chemistry and physics.
First semester. W. F., 10. Mr. Sugihara

343. *Theories of Analytical Chemistry.* Theories of titrations, indicators, and pH measurement, titration in non-aqueous solvents,

equilibrium theory of chromatography, ion-exchange resins, solvent extraction, theories of gravimetric analysis, principles of some instrumental analytical methods.
Omitted 1955-56. MR. SUGIHARA

345. *Selected Topics in Advanced Nuclear and Radiochemistry.* Prerequisite: Chemistry 342.
Second semester. W. F., 10. MR. SUGIHARA

350. *Seminar.* Reports on research work being performed in the laboratory and reports and discussions of recently published work in related fields. GUEST LECTURERS, STAFF AND GRADUATE STUDENTS

360. *Coordination Compounds.* Lectures on the chemical properties of metal complexes, with emphasis on recent developments in the field of metal chelate compounds.
First semester. Time to be arranged. MR. MARTELL

361. *Principles of Instrumental Analysis.* A study of the principles involved in the use of analytical instruments, including potentiometry, infrared and ultraviolet absorption spectrophotometry, and polarography.
Second semester. Time to be arranged. MR. MARTELL

380. *Current Topics in Chemical Literature.*
STAFF AND GRADUATE STUDENTS

Department of Classics

ASSOCIATE PROFESSOR BARLOW

The Department of Classics provides undergraduate courses for the acquisition of a reading knowledge of Greek and Latin and for the study of Greek and Latin literary masterpieces in their original form. Advanced courses providing a major in Classics are offered from time to time as the need arises. In addition to the courses requiring knowledge of an ancient language, there are others given entirely in English, which deal with all phases of the Greek and Roman civilizations.

Since it may not be possible to offer courses in elementary Latin and Greek every year, students who desire to elect them should consult the instructor as far in advance as possible.

During the academic year 1955-56 the following courses were given: Greek 12, 123a, Latin 13, 17 and 123b.

1. PRIMARILY FOR UNDERGRADUATES

GREEK

11. *Elementary.* Study of Greek grammar through forms, syntax, vocabulary, and reading; selections from Xenophon's Anabasis.
Indivisible course. Omitted 1955-56.
Open to freshmen.
Through the year. MR. BARLOW

12. *Plato, Apology and Crito; Homer, Iliad.*
Prerequisite: Greek 11.
Through the year. M. W., 1. F., 2. MR. BARLOW

13. *Greek Drama.* Prerequisite: Greek 12 or equivalent.
To be offered 1956-57. MR. BARLOW

123a. *Greek Civilization.* Lectures and readings on the history, literature, philosophy, art, religion, and government of Greece, with emphasis on the elements which have contributed most to Western civilization. Given in English.

Greek 123 may be counted in fulfillment of the general requirement in art, music, and literature (Group D), but not in fulfillment of the requirement in foreign language.
Open to freshmen.
Half course. First semester. M. W. F., 11 MR. BARLOW

LATIN

11. *Elementary.* Introduction to the Latin language through study of forms, syntax, and vocabulary, with emphasis on the Latin element in English words. Reading of selections from Latin prose.
Indivisible course. Omitted 1955-56.
Open to freshmen.
Through the year. MR. BARLOW

12. *Cicero, Orations; Vergil, Aeneid.*
Prerequisite: Latin 11 or two years of Latin for admission.
Open to freshmen. MR. BARLOW

13. *Selections from Horace and Catullus; Comedies of Plautus and Terence.* The work of the course may begin with easy prose selections, to satisfy the lack of uniformity in preparation in secondary schools.
Prerequisite: Latin 12 or three or four years of Latin for admission.
Open to freshmen.
Through the year. M. W. F., 9. MR. BARLOW

15. *Livy and Tacitus; Cicero, De Amicitia, and Lucretius.*
Prerequisite: Latin 13.
Through the year. To be offered 1956-57.

17. *Roman Satire; Poets of the Augustan Age.*
Through the year. M., 2-3:15. Th., 11-12:15. MR. BARLOW

19. *Survey of Latin Literature.*
Course not regularly offered. MR. BARLOW

123b. *Roman Civilization.* Lectures and readings on the history, literature, philosophy, art, religion, law, and government of ancient Rome, with emphasis on the transmission of Greek civilization, on the developments which have contributed to Western civilization, and on the condition of the Roman Empire during the early years of the development of Christianity. Given in English.

Latin 123 may be counted in fulfillment of the general requirement in art, music, and literature (Group D), but not in fulfillment of the requirement in foreign language.
Open to freshmen.
Half course. Second semester. M. W. F., 11. MR. BARLOW

Department of Economics and Sociology

PROFESSOR MAXWELL, ASSOCIATE PROFESSOR MELDER, ASSOCIATE PROFESSOR KILLIAN, ASSOCIATE PROFESSOR HARGEST, ASSOCIATE PROFESSOR KELLEY, ASSISTANT PROFESSOR NORDSTROM, ASSISTANT PROFESSOR HUND, ASSISTANT PROFESSOR VAN TASSEL, LECTURER BREEN

The first aim of the department, in its undergraduate courses, is to give the student a comprehensive grasp of the underlying principles and functions of our economic and social institutions, and to develop habits of systematic and unbiased thought about these institutions. Some of the courses, however, contribute to the student's preparation for a business or professional career (Economics 13, 15a, 22, 26, etc.) and are specifically recommended to students who are candidates for the degree of Bachelor of Business Administration. Conversely, some students majoring in economics may be advised to elect certain courses in Business Administration which are credited toward the degree of Bachelor of Arts (Business Administration 10, 16, 112, 117, 18, 124, 127, 20, 27a, 203, 220).

Students who have an interest in Business Administration but prefer a program which is less intensive than that required of candidates for the degree of Bachelor of Business Administration may enroll as candidates for the degree of Bachelor of Arts with a major in economics. Such students should take the normal college program for freshmen and should elect *Business Administration* 10 for the Group B requirement. In the second year they should elect *Economics* 11 and *Business Administration* 117. In the third and fourth years they should elect courses in economics and in business administration in consultation with their advisers.

Economics 11 is a prerequisite to all other courses in economics. Similarly Sociology 11 is a prerequisite to other courses in sociology. Courses taken outside the department in partial fulfillment of the major requirement should be selected, subject to departmental approval, so as to provide a unified program centering about the student's major interest. Majors in economics will ordinarily be required to take Economics 205a, Intermediate Economic Theory, and also Economics 280a, Senior Comprehensive.

Candidates for departmental honors will engage in a program of independent study consisting of reading and research designed in part to give them specialized training in the fields of their major interest and in part to supplement formal courses. Ordinarily a student will not begin his independent study until the second semester of the junior year, nor will he undertake the equivalent of more than two courses in this manner.

Courses in sociology will be found listed, with descriptions, immediately after the list of courses in economics.

In making elections, students should bear in mind that some advanced courses are offered only in alternating years.

GRADUATE WORK

Students expecting to enter upon graduate work should have mastered creditably basic courses in economics equivalent to at least four courses, including Economics 11; those whose preparation is inadequate should expect to remove the deficiency before proceeding to study for a higher degree.

A range of courses sufficient for the needs of candidates for the doctorate is offered in cycles of two or three years. Individual work with instructors and in small intimate seminars constitutes a goodly part of the graduate student's program. The classification of courses as undergraduate, intermediate, and graduate is necessarily an elastic one. Graduate students electing courses in the undergraduate category will be required to do additional work.

Fellowships, scholarships, assistantships, and other aids are available to a limited number of worthy students.

Attention is directed to closely allied courses offered in geography, history and international relations, and psychology.

Courses in Economics

During the academic year 1955-56 the following courses were given: Economics 11, 13a, 13b, 15a, 140b, 21b, 22, 24b, 25b, 26, 28, 205a, 207, 211b, 280a, 39a, 311, 322, 324, 325, 326, 327, 339, 340.

Descriptions of courses listed below under the designation "Business Administration" will be found in the announcement of "Courses in Business Administration".

1. PRIMARILY FOR UNDERGRADUATES

11. *Principles of Economics.* An introduction to the fundamental economic principles, together with a study of the practical application of these principles to the problems of American life.
Indivisible course.
Through the year. Tu. Th., 10; a third hour to be arranged.
Mr. Van Tassel
Assisted by Mr. Wightman

Business Administration 112. Personnel Management.

Business Administration 117. Accounting.

Business Administration 124. Marketing.

Business Administration 127. Intermediate Accounting.

13a. *Money and Banking.* The principles of money and banking; characteristics of the American monetary and banking system; theoretical relations of money, prices, income.
Half course. First semester. M. W. F., 10. Mr. Maxwell

13b. *Money and Banking.* Central banks, particularly the Federal Reserve System; monetary standards; theories of foreign exchange; monetary policy in the United States.
Prerequisite: Economics 13a or its equivalent.
Half course. Second semester. M. W. F., 10. MR. MAXWELL

140b. *Consumer Economics.* A study of the consumers' roles in a market economy and of their problems arising in the purchase of the customary goods and services. Emphasis is upon housing, insurance, savings, investments, consumer services supplied by advertisers, private non-commercial agencies, the government, and the cooperative movement.
Half course. Second semester. Tu. Th., 10, third hour to be arranged. MR. MELDER

15a. *Public Finance.* The principles of governmental expenditures, revenues, and debts, with particular reference to the United States.
Half course. First semester. M. W. F., 9. MR. MAXWELL
Business Administration 16. Statistics.
Business Administration 18. Business Organization and Finance.

115b. *Fiscal Development of the United States.* This course treats the development of the functions and revenues of the federal government and of the state governments (with brief notice of municipalities). For the recent period most attention is given to federal-state fiscal interrelations in the form of federal grants-in-aid, tax conflicts and shared taxes. Recent proposals for a revision of federal-state fiscal relations both for the purpose of bringing federalism up to date and for implementing a high employment program are considered.
Prerequisite: Economics 11, or concurrent enrollment.
Half course. Second semester. MR. MAXWELL
Omitted 1955-56.

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

Business Administration 20. Business Law.

205a. *Intermediate Economic Theory.* An analysis of contemporary economic theory, with attention to consumer demand, production, factor demand, prices, market structure, and aggregate economics.
Half course. First semester. Tu. Th., 8; F., 2. MR. VAN TASSEL
Business Administration 203. Marketing Research.

207. *International Economics.* The first half of the course reviews the rise of an international economy, the theory which accompanied it and the monetary mechanisms and analysis which underlay its opera-

tion. The second half is concerned with problems created by national policies, wars, and depressions.

Through the year. Tu. Th., 2-3:15.

Mr. Melder and Mr. Van Tassel

21a. *Business Cycles.* Analysis of recurrent business fluctuations differentiating the typical business cycle and its phases. Treatment of the history, theories of causation and proposals for control of the business cycle.

Half course. First semester. Tu. Th., 11-12:15.
Omitted 1955-56.

21b. *National Income Analysis.* A study of national income accounts and analysis of depression, full employment and inflation under capitalism. Special emphasis on the work of J. M. Keynes and other contemporaries.

Half course. Second semester. M., 1-2:15; Th., 11-12:15

Mr. Van Tassel

210a. *Economic and Social Reform.* A study of the development of economic institutions involved in society's attempt to solve its basic economic problems. General emphasis on free enterprise, planning and contemporary industrial organization oriented towards an improved understanding of the American economy.

Half course. First semester.
Omitted 1955-56.

211b. *Comparative Economic Systems.* An analysis of contemporary or recent industrialized economic systems such as capitalism, socialism, and fascism followed by a consideration of these systems as currently or recently found to exist in specific nations.

Half course. Second semester. Tu. Th., 8:35-9:50. Mr. Hund

Business Administration 220. Analysis of Business Problems.

22. *Labor Economics and Labor Problems.* The first semester is devoted to a survey of the nature of labor economics and labor problems, including the several approaches of organized workers and employers to these problems. The second semester is concerned with the approach of government to labor force problems including industrial relations and social insurance.

Through the year. Tu. Th., 9; F., 1. Mr. Melder

231. *Economic History of the United States.* In the first semester, colonial agriculture, industry, commerce and finance are briefly treated, followed by the Revolution and the Constitution, financing the Revolution, economic development to the Civil War, economic background

and consequences of the Civil War. In the second semester the main topics are economic developments in agriculture, transportation, population, labor, industry, finance, currency and banking.

Through the year. W. F., 11-12:15.
Omitted 1955-56. MR. MAXWELL AND MR. CAMPBELL

24b. *History of Economic Doctrine.* After a quick survey of ancient writers, attention will be given to Mercantilism and the doctrinal reaction from it as expressed by the Physiocrats and the Classical economists.

Half course. Second semester. M. W. F., 11. MR. MAXWELL

25b. *Problems in Public Finance.* This course deals mainly with problems of post-war taxation and fiscal policy. The theory underlying the so-called "full employment" act of 1946 is discussed, along with methods by which it may be implemented. Other questions for examination are reform of the federal corporate income tax and death duties, incentive taxation, federal debt policy, the capital budget, federal budgetary procedure.

Half course. Second semester. M. W. F., 9. MR. MAXWELL

26. *Industrial Organization and Governmental Control.* An analysis of industrial organization and the resulting market structures followed by a consideration of the various forms of governmental regulation applied to this organization and structures. Case studies of selected industries are used as a tool in this analysis with emphasis on the appropriateness of existing governmental controls in specific industrial situations. The course is conducted on a seminar basis with emphasis on student participation.

Through the year. M. W., 2-3:15. MR. HUND

Business Administration 27a. International Trade and Finance.

28. *Research in Selected Economic Problems.* Includes departmental honors work and other individual projects completed for credit.

Hours as arranged. STAFF OF THE DEPARTMENT

280a. *Senior Comprehensive.* A survey designed to assist majors in integration of the field. Required for all senior majors.

Half course. First semester. Hours as arranged.
STAFF OF THE DEPARTMENT

29a. *Economics of Transportation.* A study of the development of the transportation system of the United States; its contemporary structure, importance, and economic aspects; the development of public control. Railway rate making and standards therefor; railway combinations and proposals for consolidation; railway labor problems.

Half course. First semester. Hours as arranged.

Omitted 1955-56.

3. PRIMARILY FOR GRADUATE STUDENTS

39a. *Economic Theory.* Analysis of the theories of representative economists. Most attention is given to Marshall, Chamberlin, Keynes.

Half course. First semester. Hours to be arranged. MR. MAXWELL

311. *Seminar.* STAFF OF THE DEPARTMENT

Through the year. Hours to be arranged.

Research courses are offered to meet the needs of the individual students for work not presented in regularly scheduled courses.

322. *Research in Labor.* MR. MELDER

324. *Research in Marketing.* MR. KELLEY

325. *Research in Public Finance and Money and Banking.* MR. MAXWELL

326. *Research in Business Organization and Government Control of Business.* MR. HUND

327. *Research in International Economics.* MR. MELDER

Thesis. STAFF OF THE DEPARTMENT

339. *Research in Economic Theory.* MR. MAXWELL

340. *Thesis.* STAFF OF THE DEPARTMENT

Sociology

An undergraduate whose primary interest is in sociology may meet the departmental requirement for a major by completing Economics 11 and three or four courses in sociology together with three or two approved courses in related departments. History 10, 205 and 230, Psychology 200 and 203, and Government 15 are particularly recommended for this purpose.

GRADUATE WORK

Students expecting to enter upon graduate work should have mastered creditably basic courses in sociology equivalent to at least four courses, including Sociology 11; those whose preparation is inadequate should expect to remove the deficiency before proceeding to study for a higher degree.

A range of courses sufficient for the needs of candidates for the master's degree only is offered. Individual work with instructors and in small intimate seminars constitutes a goodly part of the graduate student's program. The classification of courses as undergraduate, intermediate, and graduate is necessarily an elastic one. Graduate students electing courses in the undergraduate category will be required to do additional work.

Fellowships, scholarships, assistantships, and other aids are available to a limited number of worthy students.

Attention is directed to closely allied courses offered in philosophy, geography, history and international relations, and psychology.

Courses in Sociology

During the academic year 1955-56 the following courses were given: 11a, 11b, 25a, 25b, 27a, 29.

1. PRIMARILY FOR UNDERGRADUATES

11. *Introductory Sociology.*

11a. *Principles of Sociology.* A consideration of the basic principles of sociology including the development of man; culture; culture and personality; social organization and structure; groups and group life; social relations; social norms; collective behavior; human ecology and population; socialization and social interaction; social disorganization and change; social institutions.
Prerequisite for further work in sociology.
First semester. Tu. Th., 8; a third hour to be arranged.

Mr. Killian
Assisted by Mr. Finneran

11b. *Sociological Analysis.* An analytical and theoretical approach to the materials in 11a, with emphasis on the development of sociological ideas and their use in policy making and in problem analysis. Advanced readings will be used and an emphasis will be placed on social structure and change.
Prerequisite for further work in sociology.
Second semester. Tu. Th., 8; a third hour to be arranged.

Mr. Killian
Assisted by Mr. Finneran

12a. *Introduction to Cultural Anthropology.* The evolution and development of man and his culture: Basic concepts; the races of man and their distribution; process of adaptation and adjustment through culture; primitive, historic and modern culture complexes compared; divergence, transmission, and function of culture; origin and growth of civilizations; contemporary pre-literate peoples; relationship of anthropology to the other social sciences.

Half course.
Omitted 1955-56.

12b. *Race and Nationality.* The meaning of race; the distribution of ethnic groups; ethnic group characteristics—biological and environmental theories. The meaning of nationality; early types of immigrants in America; the cultural backgrounds of the earlier Americans. American minority groups and problems—the Negro, the Jew and other minority groups. The effects of later immigration; immigration restrictions and the quota system; displaced persons and proposed legislative control measures; prospective future of the American population.

Half course.
Omitted 1955-56.

13a. *Crime, Delinquency and Society.* Study of the explanations for crime and delinquency; history of punishment; other methods of control. Survey of the English and American criminal law and administration of criminal justice; development of penal and correctional methods including probation, parole, release procedures; the juvenile court. Proposals for youth courts and youth correction authorities. Emphasis on crime as a system of behavior. Proposals for dealing with crime and delinquency.

Half course. Mr. Killian
Omitted 1955-56.

16b. *Social Problems and Their Analysis.* A study of current social problems in the setting of social and cultural change; trends affecting the quantity and quality of problems; mobility, urbanization, secularization, individualization, population composition. A study, in this setting, of typical and selected problems such as dependency, personal maladjustment, group disfunction, institutional breakdown, minority groups and deviant behavior with particular reference to policy formation and institutional procedures.

Half course. Mr. Killian
Omitted 1955-56.

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

21b. *The Family and Society.* A study of the form and function of the family at different culture levels; the influence of geographic, biological, demographic and cultural forces; secondary groups and the family; rural and urban family.
Half course. MR. KILLIAN
Omitted 1955-56.

24b. *Community Organization.* The contemporary American urban and rural community in action. Nature and types of community; its place in history. Organization of communities in rural and urban life. Community studies and surveys. The constellation of community social agencies. The field of social work, recreation and welfare. Community chests and councils. Sociology and community organization.
Half course. MR. KILLIAN
Omitted 1955-56.

25a. *Social Institutions.* Institutional theory: the history and development of major social institutions.
Social Control and Social Institutions. The basis of institutions in primitive experience: life functions and belief systems of primitive peoples; family and kinship systems as points of departure for institutional differentiation. Religious institutions: institutional aspects of religions in the historical contexts of Hebrew, Greek, Roman and modern experiences.
Half course. First semester. M. W., 2-3:15. MR. KILLIAN

25b. *Social Institutions. Legal Institutions.* Law and the social order: development of Western legal institutions; the normative content and analysis of legal institutions and law; relation to religious institutions; the legal tradition in Western society; law as a means of social control. Law, science and policy: law and its functions in modern times; the changing basis of legality; premises concerning man and his world in relation to law and its function. Sociology, anthropology and law: selected readings in theory and analysis of case materials.
Second semester. M. W., 2-3:15. MR. KILLIAN

27a. *Industrial Sociology.* A study of industrial society with special emphasis on the relationships among persons as members of the many groups included in this society and on the impact of social institutions on the character of the relationships studied. The formal and informal groups within the industrial form will be given attention as will the firm and community viewed as interacting organizations.
Half course. First semester. Tu. Th., 8:35-9:50. MR. HUND

28. *Research in Selected Sociological Fields.* Includes departmental honors work and other individual projects completed for credit.
Through the year. Hours as arranged.

See also: Economics 140b, 210a, 22.

29a. *Social Theory and Introduction to Sociological Concepts.* The development of man's ideas about social life, emphasizing the chief contributions from Plato and Aristotle to Herbert Spencer. The general progress of sociology since Spencer.
Half course. First semester. M. W., 11-12:15. MR. KILLIAN

29b. *Advanced Sociological Theory.* A study of Sumner, Durkheim, Max Weber, and some recent concepts.
Half course. Second semester. M. W., 10-11:15. MR. KILLIAN

3. PRIMARILY FOR GRADUATE STUDENTS

38. *Research.*

See also: Economics 311, 322.

Department of Education

PROFESSOR JONES, ASSOCIATE PROFESSOR BORGER, ASSISTANT PROFESSOR COFFEE, ASSISTANT PROFESSOR HYBELS, LECTURERS HARRIMAN AND SHEPHERD

With the cooperation of ASSOCIATE PROFESSOR WARMAN of the Graduate School of Geography, ASSISTANT PROFESSOR BECK of the Department of Philosophy, MR. GRANGER, Director of Physical Education for Men and MISS HUGHES, Dean for Women.

The department has as its primary objective the providing of professional study for teachers and prospective teachers in secondary schools. It offers work leading to the degree of Master of Arts in Education and specializes in instruction leading to that degree. Many of the regular courses are scheduled in the late afternoons to meet the needs of both full-time students in Education and in-service teachers.

UNDERGRADUATE WORK

A program of training for elementary school teaching was instituted for undergraduate students in 1953. This program is designed for juniors and seniors who have developed a strong and varied program of general studies in the first two years of college and who are interested in working with children of the age range of 10 to 14. The program includes not only the more essential courses in educational psychology, child study, and principles of teaching, but also a period of internship teaching in the senior year.

For undergraduate students interested in secondary school teaching as a career (and many Liberal Arts college graduates will be needed in this field), the department recommends high concentration upon the subject-matter fields in which they desire to teach, and suggests that they reserve for a fifth year the professional work in the theory and practice of education. In keeping with this general plan an undergraduate major in education is not offered.

GRADUATE WORK

The requirements for the degree of Master of Arts in Education cannot be adequately stated in terms of courses to be taken, because the evaluation of the work of each student will be made on the basis of achievement rather than on the basis of courses completed. However, the minimum essentials in terms of course requirements are outlined below.

Course requirements. The student is expected to elect one of the following groups of studies as the field in which he wishes to teach:

(a) Mathematics and natural sciences
(b) History, geography, and economics
(c) Ancient and modern foreign languages
(d) English, alone or in combination with some related subject.

Prior to receiving the degree, the candidate must have completed in undergraduate and graduate study combined not less than five year-courses in one of the above groups, or in a combination of groups approved by the Department of Education. At least two semester-courses in a subject-matter field must be taken as a part of the study in residence for the advanced degree and must be passed with a grade satisfactory for graduate credit. In addition to the above requirement in the subject-matter field, eight semester-courses of graduate work in education will normally be required. The program of courses to meet these requirements must be approved in advance by the Department. Changes in the proportion of education and subject-matter courses may be made by the Department on the basis of the candidate's previous training. Work, additional to the above requirements, either in the subject-matter field or in education, or both, may be required if this seems necessary for the adequate preparation of the candidate.

Internship Teaching. The Department provides opportunities for internship teaching under supervision for all graduate students majoring in Education. For graduate students of the Department who have not had teaching experience, satisfactory work in internship teaching is a requirement for the degree of Master of Arts in Education.

Thesis or Additional Study in Lieu of Thesis. All candidates for the degree of Master of Arts in Education must choose one of the following plans:

(a) Prepare an acceptable thesis or special report.

(b) Elect, in lieu of thesis, two additional semester courses in subject-matter fields (making a total of at least 4 semester courses in subject-matter area). This plan will apply primarily to experienced teachers and particularly to those doing much of their study in the summer sessions.

(c) Elect in lieu of thesis, a two-semester or double seminar in which intensive work will be required in preparing and presenting reports before fellow graduate students and the staff.

Final oral examination. The passing of a final oral examination will be required of all candidates. A representative of the student's subject matter field will be among the examining committee.

Courses in Education

During the academic year 1955-56 the following courses were given: 20b, 27b, 200a, 200b, 201a, 201b, 202a, 203b, 207b, 208a, 209a, 210a, 214, 215a, 260b, 263a, 310b, 311, 315a, 350, 380b.

PRIMARILY FOR UNDERGRADUATES

200a. *Introduction to Education.* A study of the various factors involved in the development of modern education. The course will consider the problems of the teacher and the administrator in relation to the community. It is designed for both the prospective teacher and the general student interested in education as an institution in American society.

Half course. First semester. Tu. Th., 8:35-9:50.

Mr. Borger and Mr. Hybels

200b. *Social Foundations of Education.* An analysis of elements in our American society that form the background for our educational principles and practice.
Half course. Second semester. Tu. Th., 8:35-9:50. MR. HYBELS

FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

201a. *Educational Psychology: Child Growth and Development.* A study of the principles basic to the understanding of children with special attention to emotional and social development and learning in the elementary school years.

Provision will be made for extra work for undergraduates who desire a third hour of credit.
Half course. First semester. M. W. F., 9. MR. COFFEE

201b. *Educational Psychology: Adolescent Growth and Development.* A study of psychological principles as they bear upon learning and other problems of education with special reference to the growth and development of youth of secondary school age. Extra work required of undergraduates.
Half course. Second semester. MR. JONES

202b. *History of Education.* A study of the relationship between society and its educational agencies. One of the main purposes of the course is to help prospective teachers, and others interested in the schools and their place in society, to assess the strengths and weaknesses of our educational tradition.
Half course. First semester. Tu., 2-4. Th., 2. MR. HYBELS

203b. *Curriculum Development in Secondary Education.* A study of the historical background, basic issues, principles and procedures of curriculum organization and development in secondary schools. Extra work required of undergraduates.
Half course. Second semester. MR. HYBELS

205b. *The Teaching of English.* Methods of teaching composition, poetry, drama, novel and short story.
Half course. Second semester.
Omitted 1955-56.

207b. *Use of Audio-Visual Materials in Teaching.* A survey of principles and practices in the use of visual and auditory materials and community resources in teaching. Extra work required of undergraduates.
Half course. Second semester. Th., 4-6. MR. BORGER

208a. *Methods and Materials in Secondary Education.* A study of methods and techniques used by the teacher in the high school classroom, and a survey of materials available. Extra work required of undergraduates.
Half course. First semester. F., 4-6. Mr. Hybels

208b. *Principles of Secondary Education.* A survey of the major objectives of education, the special functions of the secondary school, and the principles which underlie the learning and teaching process.
Half course. Second semester.
Omitted 1955-56.

209a. *Teaching of Social Studies.* A study of objectives, methods and materials used in the teaching of the social studies in the secondary schools. Extra work required of undergraduates.
Half course. First semester. Th., 4-6. Mr. Borger

210a. *Educational Psychology, Advanced: Psychological Approach to Citizenship Development.* A study and evaluation of the experimental evidence on the problem of values as they relate to the problems of character and citizenship development among children and adolescents. Extra work required of undergraduates.
Half course. First semester. W., 4-6. Mr. Jones

214. *Tests and Measurements Applied to Psychological and Educational Problems.* A study of the measurement of aptitude, achievement, interest and attitude. Theoretical considerations and practical problems will be included. Extra work required of undergraduates.
Divisible course.
Through the year. M., 4-6. Mr. Jones

215a. *Internship Teaching in the Elementary School.* An extended period of observation and practice in teaching under supervision in regularly organized classes in the middle grades in public schools. Each student is assigned to a critic teacher, under whom he or she works for a minimum of two days per week for the first semester. The first two weeks of this period is normally devoted to observation; the remainder of the time to teaching, under supervision. Lesson planning, pupil evaluation, and playground supervision are required of each student.
Half course. First semester. Mr. Jones, Mrs. Harriman,
and Critic Teachers

20b. (*Geography* 20b.) *Geography in Education.* A survey of geography in the present-day American schools. The course is designed to meet the needs of those expecting to teach geography. Extra work required of undergraduates.

Half course. Second semester. W. F., 1-2. MR. WARMAN

27b. *Principles of School and Recreational Leadership.* The aim of this course will be to present the basic concepts and techniques of educational and recreational leadership. Lectures, readings, discussions, and field work. Permission of instructor required for registration. Extra work required of undergraduates.

Half course. Second semester. M., 4-6. MISS HUGHES

263a. *Methods and Materials in Teaching of Language Arts in the Elementary School.* This course considers methods and materials in the teaching of the language arts, in the middle grades, with special reference to reading. Particular emphasis will be given to provision for individual differences in teaching, and to the development of independent study skills. Field trips to selected schools will be arranged. Extra work required of undergraduates.

Half course. First semester. F., 4-6. MR. SHEPHERD

260b. *Methods and Materials in Elementary Education.* A study of the most essential materials and methods in elementary school instruction. Special attention will be given to the methods of teaching and learning in the social studies and mathematics, with brief units on the methods of cooperating most effectively with special teachers in the arts. Lectures and demonstrations by visiting specialists will be provided on particular topics, and field trips will be arranged for classroom demonstrations of certain principles and procedures. Extra work required of undergraduates.

Half course. Second semester. F., 4-6. MR. SHEPHERD

290b. *Philosophy of Education.* An examination of aims, processes and materials of education with special reference to the influence of philosophical ideas on educational problems.

Half course. Second semester. T. Th., 8:35-9:50. MR. BECK
Omitted 1955-56.

PRIMARILY FOR GRADUATE STUDENTS

310b. *Citizenship Development: Methods and Materials.* A study of procedures and programs in character and citizenship education in the schools. Attention will be given not only to curricular and co-curricular activities in the schools but also to the inter-relations between the school and other institutions and agencies in the community as they relate to the development of values and conduct in youth.

Half course. Second semester. T., 4-6. MR. JONES

311. *Educational and Vocational Guidance.* A survey of the techniques and tools of the educational and vocational counselor, including occupational information, vocational testing, methods of interviewing and counseling, case histories and reports, administration and organization of educational and vocational guidance programs.
Through the year. Tu., 4-6. MR. COFFEE

313. *Statistical Methods.* The purpose of this course will be to give an understanding of and practice in the statistical methods most valuable in measurement and research in education and allied fields.
Through the year. MR. JONES
Omitted 1955-56.

315a. *Internship Teaching in the Secondary School.* An extensive period of observation and teaching in the field or fields in which the student plans to teach in secondary school. Individual supervision is given by the department and by critic teachers in coöperating schools.
First semester. Time to be arranged.
MR. JONES, MR. HYBELS AND CRITIC TEACHERS

350. *Research in Education.* Individual direction of students in their research projects. THE STAFF

380. *Departmental Seminars on Current Problems.*
Double seminar. Second semester. M. Th., 7:30-9:30.
THE STAFF AND GRADUATE STUDENTS

Department of English

PROFESSOR ILLINGWORTH, ASSOCIATE PROFESSOR ANDERSON, ASSOCIATE PROFESSOR CARTER, ASSISTANT PROFESSOR LETENDRE, ASSISTANT PROFESSOR BEARD

All freshmen who are candidates for the degree of Bachelor of Arts must take both English 11a and b. Freshmen enrolled in the Division of Business Administration are required to take English 11a and Business Administration 14b. Freshmen may also enroll in English 143a.

General Education 17 (Great English and American Writers) is designed especially for non-English majors, and either half is recommended for students who wish to take a course in literature as a means of fulfilling the requirement of a third semester of English beyond English 11. English 13a, 111, and other courses (with the consent of the instructor) are also open to non-English majors; especially recommended is English 13a (Introduction to Poetry).

A major in English consists of a minimum of seven courses in addition to English 11, as follows:

1. English 13a. Normally this course should be taken in the sophomore year. *For English majors,* English 13a is prerequisite to any of the following courses: 101b, 104, 105, 110, 113, 117b, and 122a.
2. English 150b and three other half-courses in English from a group of courses open only to juniors and seniors, namely: 101b, 104, 105, 110, 113, 117b, and 122a.
3. Three additional half-courses in English.
4. Three courses in allied fields: General Education 14; a year course in philosophy (preferably Philosophy 12); and one other course approved by the Department of English, preferably from the following list: Fine Arts 11, General Education 143, French 113, German 141, Greek 123a, History 12, History 230, Latin 123b, and Music 12.

An English major who has not been credited with two units of Latin or Greek for admission to the college must complete either a course in Latin or Greek or both the following half-courses, given in English: Greek 123a and Latin 123b. If possible, this requirement should be met in the freshman year.

English majors should follow as closely as possible the following program:

First year

English 11
Group A
Group B (General Education 14)
Foreign language
One elective (A course which meets the general bachelor of arts requirement in Fine Arts is recommended.)

Second year

English 13a and three other half-courses in English from group of courses open to sophomores, namely: 16a, 18, 19b, 111, 126a, 127a, 142a, 143a, 146a, 147b, and General Education 18
Group A
Foreign language
Two electives. Courses recommended are Fine Arts 11, Music 12, General Education 143, History 12 and 230, French 113, German 141, Latin 123b and Greek 123a.

Third year

Two half-courses in English from courses open only to juniors and seniors
Two other half-courses in English (recommended)
Foreign language
Group B (a year course in philosophy)
One elective

Fourth year

English 150b and one other half-course in English from courses open only to juniors and seniors
Two other half-courses in English (recommended)
Three electives.

PRIZES IN ENGLISH

The Hoyt Poetry Prize of fifteen dollars is awarded annually by the Department of English for the best poem by an undergraduate. This is the interest on a fund established by the alumni as a memorial to Prentiss Cheney Hoyt, Professor of English at Clark University from 1909 to 1920.

The Loring Dodd Drama Contest, inaugurated in 1955, offers a prize of $25 to the student writing the best one-act play. Loring Dodd was Professor of English from 1910 to 1949 and also Chairman of the English Department.

Courses in English

During the academic year 1955-56 the following courses were given: 11, 12, 13a, 16b, 18a, 104, 110, 113, 122a, 127b, 150b; Business Administration 14b, 17a; General Education 17b, 18.

Courses in English are classified under the following headings:

I	Composition
II A	Literature, Surveys and Other General Courses
II B	Literature, Special Periods or Individual Authors
III	Public Speaking and Dramatics

Course number	Classification	
11	I	Composition
12	III	Public Speaking and Dramatics
13	II A	Literature, Surveys, etc.
16	I	Composition
18	II A	Literature, Surveys, etc.
19	I	Composition

101	II B	Literature, Special Periods, etc.
104	II B	" " " "
105	II B	" " " "
110	II B	" " " "
111	II A	Literature, Surveys, etc.
113	II B	Literature, Special Periods, etc.
117	II B	" " " "
122	II B	" " " "
126	II B	" " " "
127	II B	" " " "
142	II A	Literature, Surveys, etc.
143	II B	Literature, Special Periods, etc.
146	III	Public Speaking and Dramatics
147	III	" " " "
150b	II A	Literature, Surveys, etc.

I. COMPOSITION

11. *Composition and Literature.* The purpose of English 11 is to develop clarity and accuracy in reading and writing and to introduce the student to the various types of literature.

Required of freshmen in the Bachelor of Arts program. The first semester is required of freshmen in the Business Administration program.

Through the year. M.W.F., 8, 9, and 10; M.W., 2-3:15; Tu. Th., 8 and F., 2; Tu. Th., 9 and F., 1; Tu. Th., 10 and M., 1.

MR. ANDERSON, MR. BEARD, MR. CARTER,
AND MR. LETENDRE

16b. *Creative Writing.* Projects in the writing of expository prose, narrative fiction, the one-act play and verse.

Half course. Second semester. M. W. F., 10. MR. LETENDRE

19b. *Advanced Composition.* This course is designed for students who desire further training in the basic principles of composition. Special attention is given word choice, sentence and paragraph structure, and organization. Exposition is emphasized. Individual conferences.

Half course. Second semester.

Omitted 1955-56.

II A. LITERATURE: SURVEYS AND OTHER GENERAL COURSES

13a. *Introduction to Poetry.* Required of all English majors.

Half course. First semester. M .W. F., 9. MR. CARTER

General Education 17. Great English and American Writers. See "General Education" immediately preceding the alphabetical list of "Departments and Courses."

18. *The Bible as Literature.* First semester, Old Testament; second semester, New Testament.
First semester offered in 1955-56. M. W. F., 10.
Mr. Illingworth

111. *A Survey of American Literature.* A course in American literature from Puritan times to the present.
Divisible for non-English majors.
Through the year. Tu. Th., 10-11:15.
Mr. Anderson, *first semester*
Mr. Letendre, *second semester*
Offered in alternate years. Omitted in 1955-56.

142a. *The English Novel.* A study of the novel from its beginning to Thomas Hardy.
Half course. First semester. Mr. Illingworth
Omitted 1955-56.

150b. *Senior Survey.* Required of all English majors in the senior year.
Half course. Second semester. M. W., 2-3:15. Mr. Anderson

II B. LITERATURE: SPECIAL PERIODS OR INDIVIDUAL AUTHORS

101b. *Chaucer.*
Half course. Second semester. Tu. Th., 9; F., 1. Mr. Anderson
Offered in alternate years. Omitted 1955-56.

113. *Shakespeare and the Elizabethan Drama.*
Divisible course. Through the year. Tu. Th., 10-11:15.
Mr. Anderson
Offered in alternate years. To be omitted 1956-57.

104. *Milton and the Seventeenth Century.*
Divisible course.
Through the year. Mr. Carter
Offered in alternate years. To be omitted 1956-57.

105. *Eighteenth Century.*
Divisible course.
Through the year. M. W. F., 10. Mr. Carter
Offered in alternate years. Omitted 1955-56.

117b. *English Romantic Poetry.*
Half course. Second semester. M. W. F., 9. Mr. Beard
Offered in alternate years. Omitted 1955-56.

110. *Victorian Literature.*
Divisible course. Through the year. M. W. F., 11. Mr. Beard
Offered in alternate years. To be omitted 1956-57.

122a. *Modern Poetry.* Dickinson, Hopkins, Frost, and Eliot are used as key figures in a general survey of the main trends in modern poetry and poetic criticism.
Half course. First semester. Tu. Th., 8:35-9:50. Mr. Letendre
Offered in alternate years. To be omitted in 1956-57.

126a. *Modern British and American Drama.*
Half course. First semester. Tu. Th., 8:35-9:50. Mr. Letendre
Offered in alternate years. Omitted 1955-56.

127b. *Modern Continental Darama Drama.*
Half course. Second semester. Tu. Th., 8:35-9:50 Mr. Letendre
Offered in alternate years. To be omitted 1956-57.

143a. *The Modern Novel.* A comparative study of representative twentieth century novels of Russia, Germany, France, Sweden, England, and the United States to show how different cultures have treated this vehicle of literary expression.
Open to freshmen.
Half course. M. W. F., 10. Mr. Illingworth
Offered in alternate years. Omitted 1955-56.

III. PUBLIC SPEAKING AND DRAMATICS

12. *Public Speaking.* A course in the composition and delivery of the most commonly used speeches, parliamentary procedure, discussion groups, and vocabulary drill.
Indivisible course.
Through the year. M. W. F., 9. Mr. Illingworth

146a. *Oral Interpretation of Literature.* A course stressing the imagination and the dramatic instinct as fundamental sources of good oral and pantomimic expression. The intellectual elements of vocal expression are studied with special reference to phrasing, inflection, and emphasis; individual and choral speaking.
Permission of the instructor is a condition for enrolling in this course.
Half course. First semester. Mr. Illingworth
Omitted 1955-56.

147b. *The Oral Interpretation of Shakespeare.* The life of Elizabethan England with special emphasis on the theatre of Shakespeare. The plays to be read will include *Hamlet, Cymbeline, Julius Caesar,*

King Lear, Othello, The Comedy of Errors, Merchant of Venice, Taming of the Shrew, As You Like It, Henry V and *Richard II.*
Half course. Second semester. MR. ILLINGWORTH
Omitted 1955-56.

Department of Fine Arts

(ART AND MUSIC)

ASSISTANT PROFESSOR COWARDIN, ASSISTANT PROFESSOR CARPENTER, MR. RAFFMAN

With the cooperation of ASSOCIATE PROFESSOR NICOL, ASSOCIATE PROFESSOR BARLOW, ASSOCIATE PROFESSOR EDWARDS, and MR. SANTE GRAZIANI, Head of the School of the Worcester Art Museum, and his Staff.

The Department offers two programs for a major in Fine Arts. One is intended for those interested primarily in the history of art. The other is designed to provide sound training in fundamentals for qualified students whose principal interest is in the practice of art.

The second of these programs, offered in cooperation with the School of the Worcester Art Museum, has the advantage of affording a thorough professional grounding in art in combination with liberal arts training. Courses to be taken in the museum school are carefully chosen with regard to the individual student's professional objective. Thus courses vary for those interested in the practice of painting or sculpture, the teaching of art, or commercial art. Students who elect this program will have completed, upon graduation, the approximate equivalent of two years of art school training. It should be emphasized that this is a program leading to the degree of Bachelor of Arts and that students electing it must fulfill all general requirements for that degree.

The specific requirements for a major in Fine Arts are as follows:

History of Art

1) The basic course, Fine Arts 11, to be completed before the end of the sophomore year.
2) Fine Arts 111.

3) General Education 14, to be completed before the end of the sophomore year.
4) Two full courses chosen from the following: Fine Arts 15, 16, 191a, 192a.
5) One full course chosen from the following: French 113, German 141, Greek 123a and Latin 123b.
6) Music 12.

Practice of Art

1) Fine Arts 11.
2) General Education 14.
3) Seven courses listed in the catalog of the School of the Worcester Art Museum.

Courses in Fine Arts

During the academic year 1955-56 the following courses in Fine Arts have been given: 11, 111, 12b, 15, 191a.

1. PRIMARILY FOR UNDERGRADUATES

Fine Arts 11. An Introduction to Western Art. A preliminary discussion of terminology and basic aesthetic considerations in the visual arts is followed by a study of architecture, sculpture, and painting from the beginnings to the present day. Field trips are required.

Open to freshmen.

Through the year. M. W. F., 8. Mr. Carpenter

Fine Arts 111. (Representation I.) Introduction to the drawing or depiction of objects in the field of vision; theory and practice in the statement of line, form, light and shade, and perspective. Study of the nature and use of materials and instruments; exercises from objects and from living models; observation of method and accomplishment found in museum collections.

Through the year. Nine class hours weekly. M. W. F., 1:30. At the Worcester Art Museum. Mr. Graziani and Miss Murphy

Fine Arts 12b. A Survey of Painting in the West. The development of pictorial expression from the beginning to the present. Emphasis is placed upon methods and styles. Field trips are required. Designed primarily for non-majors. May not be counted in addition to Fine Arts 11.

Open to freshmen.

Half course. Second semester. Tu. Th., 10; M., 2. Mr. Cowardin

Omitted 1955-56. To be offered in 1956-57.

Fine Arts 13b. An Introduction to the History of Painting and Sculpture. A consideration of some of the major styles in painting and sculpture from 600 B. C. to the present. Each style is approached in terms of a detailed study of a few principal examples. Emphasis is placed on the visual, aesthetic character of works of art. Historical context is treated only incidentally.

Half course. Second semester. Tu. Th., 2-3:15. MR. CARPENTER

Fine Arts 15. Art of the Renaissance in Italy. A detailed consideration of the architecture, sculpture, and painting of the Italian Renaissance. The first semester is devoted to the fifteenth century and the second semester to the sixteenth. Emphasis is placed on the historical background. Field trips are required. Fine Arts 11 is ordinarily prerequisite.

Through the year. M. W. F., 10. MR. COWARDIN
Offered in alternate years. Omitted in 1955-56.

Fine Arts 16. The Art of the Seventeenth and Eighteenth Centuries. A consideration of the origins of the baroque style, followed by a study of major works of European art of the seventeenth and eighteenth centuries. The principal stylistic trends are stressed. The more important artistic personalities—Bernini, Rubens, Rembrandt, Velasquez, and others, are also treated in detail. Field trips are required. Fine Arts 11 is ordinarily prerequisite.

Through the year. M. W. F., 10. MR. CARPENTER
Offered in alternate years. To be omitted 1956-57.

Fine Arts 191a. The Art of the Ancient Near East and India. This course is primarily concerned with architecture and sculpture in ancient Mesopotamia, Assyria, Persia, and India. Significant works are examined critically and studied in relation to their historical and religious background. Field trips are required.

Half course. First semester. MR. COWARDIN
Offered in alternate years. Omitted in 1955-56.

Fine Arts 192a. The Art of China and Japan. An introduction to the art of the Far East. Sculpture and painting in China from the prehistoric period to the Ming dynasty, and, in Japan, from the Suiko to the Tokugawa period. Architecture will be treated only incidentally. Field trips are required.

Half course. First semester. Tu. Th., 10; M., 2. MR. COWARDIN
Offered in alternate years. Omitted 1955-56.

Fine Arts 199. Advanced work at the School of the Worcester Art Museum for majors in the practice of art.

STAFF OF THE MUSEUM SCHOOL

Courses in Music

Music 12a. Introduction to Music. With "learning to listen" as its motif and designed for the student without previous musical training this course deals with the basic theoretical elements and materials of music.

Half course. First semester. Tu. Th., 9; F., 1. Mr. Raffman

Music 12b. Baroque and Classical Music. Characteristic works of Bach, Handel, Haydn, Mozart, and the young Beethoven will be examined with respect to historical precedent, technical devices, and style.

Prerequisite: Music 12a.

Half course. Second semester. Tu. Th., 9; F., 1. Mr. Raffman

Music 13a. Twentieth Century Music. An examination of the works of Debussy, Ravel, Stravinsky, Hindemith, Schönberg, Bartok, and other significant composers whose works have been the driving force behind the tonal advances of the past fifty years. The influence of jazz on both American and European music will be discussed, as well as jazz in its pure state.

Prerequisite: Music 12a.

Half course. First semester. Tu. Th., 10-11:15. Mr. Raffman

Music 13b. Romantic Music. Starting with the later works of Beethoven and concluding with the advent of impressionism, the German, French, and Russian masters of the 19th century are studied with respect to the stylistic innovations of the period.

Prerequisite: Music 12a.

Half course. Second semester. Tu. Th., 10-11:15. Mr. Raffman

Music 14b. Practical Music. Designed primarily for the student with previous musical training and with structural analysis of music as its motif, this course deals extensively with music theory and ear training. There is dictation from both piano and records, as well as extensive score reading.

Prerequisite: permission of instructor.

Half course. Second semester. Time to be arranged.
Mr. Raffman

Offered in alternate years. Omitted 1955-56.

French

A description of the offerings in French and a list of courses in French will be found in the announcement of the Department of Romance Languages.

Freshman Orientation Course

Orientation. A required non-credit course for freshmen. Two periods per week are required for the first semester. Additional class periods are planned during the second semester to discuss the selection of a major field of study.

Orientation: the history and nature of the university; liberal and vocational education; the curriculum; the individual in relation to the institution, the staff and fellow students; the library; reading; note taking; methods of study; examinations; etc.

Dean Hughes and Dean Borger

Physiology: human anatomy and physiology as related to health, efficiency and human relationships.

Dr. Constantian and Dr. Kressler

General Education

General Education courses are described under the heading "General Education" at the beginning of this section of the catalog.

Geography

Professor Van Valkenburg, Professor Murphy, Professor
Lougee, Associate Professor Warman, Associate
Professor Higbee, Instructor Burnham,
Visiting ~~Professor~~ Raisz
Lecturer cf p 191

A complete statement of the organization and special requirements in the Graduate School of Geography will be found in an earlier section of this catalog under the heading The Graduate School of Geography.

UNDERGRADUATE PROGRAMS

Undergraduates planning to major in geography or to enter graduate work in geography are urged to consult the geography staff early in their undergraduate courses, to plan suitable programs including essential courses in related fields.

Majors in geography are required to take seven year-courses, or the equivalent, in geography and related fields. At least four, and not more than five of these courses must be in geography.

Geography 10, Principles of Geography, is usually taken in the freshman year (or as early as possible after the major subject is chosen to be geography). One or two of the following courses may be taken during the sophomore year: Geography 12a, Introduction to Climatology; Geography 16, Economic Geography; Geography 191, Cartography.

Courses in geography, such as 28a, Geography of New England, or 25, Conservation of Natural Resources, or regional courses should not be undertaken until the junior or senior years. Juniors of superior standing and seniors may be accepted, by special permission, to take number "2" geography courses, such as 27a, Human Geography; 27b, Cultural Geography; 201, Political Geography; 20b, Geography in Education (primarily for those expecting to teach); 282a, Geography of North America; 283b, Geography of South America; 285a, Geography of Europe. A non-credit seminar is conducted for all seniors who are majoring in geography.

COURSES IN FIELDS RELATED TO GEOGRAPHY

Students majoring in geography should plan early to take the required courses in other fields in order to possess the prerequisites for admission to advanced related courses in their junior and senior years to parallel the courses in their geography program.

Subjects in Group A, which are strongly recommended by the staff of the Department of Geography, are geology and biology. However, where special interest is expressed in physics, chemistry, psychology, or mathematics the student's program can be planned to include these subjects.

Related fields may be found listed under Group B. General Education 14 is recommended for the freshman year. Courses recommended for the sophomore year are: Sociology 11, Economics 11, Government 15, History 12. More advanced work in the fields of sociology, international relations, psychology and philosophy will depend largely upon the individual student's interests and desires.

"HONORS WORK" AND COMPREHENSIVE EXAMINATIONS

The Clark University Graduate School of Geography offers opportunity to properly qualified students for advanced training in geography. The staff, composed of specialists in their various fields of geography offer regular courses in instruction and direct advanced students in research work. Hence, a junior or senior pursuing an "honors program" in geography is afforded an opportunity to associate with other students in the Graduate School of Geography. For example, a superior student, after petitioning and receiving approval of the College Board and the Secretary of the Graduate Board, may undertake Geography 391, Advanced Cartography; 314, Physiography of the Western Hemisphere; 33a, Soils; and 34, Land Use; 32, Climatology; 36, Problems of Economic Geography; and some graduate regional courses. On rare occasions an undergraduate student has been invited to participate in the Fall Field Camp of the Graduate School.

Independent research projects may be undertaken with the adviser in constant surveillance. This research work may be in the fields of human geography, physiography, geography in education, economic geography, land utilization, cartography and regional geography. Such research work must be completed within the semester in which it is started, or proof advanced that the study warrants more time. The staff also conducts an oral examination of at least one hour's length to ascertain the achievement of an "honors student."

A seminar, required of all seniors who are majoring in geography, is established to explore problems relative to the comprehensive examinations.

Courses in Geography

During the academic year 1955-56 the following courses were given: Geography 10, 12a, 16, 20b, 32, 33a, 33b, 36, 37a, 37b, 191, 201, 283b, 291, 298a, 298b, 300, 314, 352, 361, 385a, 385b, 391a, 391b, 399a; Geology 12; Seminar 30.

1. PRIMARILY FOR UNDERGRADUATES

10. *Principles of Geography.* An introductory course dealing primarily with the physical phases of geography and the application of the principles of geography to the study of selected regions throughout the world. Juniors and seniors admitted only by special permission.

Open to freshmen.

Through the year. M. W. F., 10. Mr. Warman

12a. *Introduction to Climatology.* Elements of meteorology and climatology with practical exercises. Emphasis on most recent theories; explanation of distribution of types of climate and weather.

Prerequisite: Geography 10 or equivalent.

Half course. First semester. M. W. F., 8. Mr. Warman

16. *Economic Geography.* The geography of the world's mineral, plant and soil resources with special reference to problems of use and conservation.

Prerequisite: Geography 10 or Economics 11, or equivalent

Through the year. M. W. F., 11-12:15. Mr. Higbee

191. *Cartography and Graphics.* Preparation of maps, graphs, charts, and block drawings. Since space is limited the instructor should be conferred with upon registration.

Through the year. M., 3-5; Tu., 2. Mr. Burnham

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

20b. *Geography in Education.* A survey of geography in the present-day American school system, designed to meet the needs of those expecting to teach geography.

This class usually meets in the late afternoon for the convenience of public and private school teachers.

Half course. Second semester. W., 4-6. Mr. Warman

25b. *Conservation of Natural Resources.* A survey of natural resources including a study of ways and means of insuring wise utilization of essential or strategic resources.

Second semester. T. W., 1. Third hour to be arranged.

To be offered in 1956-57. To be omitted 1957-58. Mr. Higbee

28a. *Geography of New England.* A field and lecture course with special emphasis on Worcester first, then New England. Class meetings begin about the middle of October, following the field camp. Because of the late beginning, three special week-end programs of three hours each of laboratory work in the field, with carefully prepared reports of each are required.

Prerequisites: Geography 10 and Geology 12, or equivalent.

Half course. First semester. M. W. F., 9. Mr. Lougee

29. *Presentation Techniques of Geographic Material.* A methods course for graduate students who plan to teach on secondary, college, and university level. Non-credit course.
Hours to be arranged. MR. VAN VALKENBURG AND MR. WARMAN

201. *Political Geography.* A study of major political problems of the world as related to geographic factors. Application of principles to international relations of selected regions.
Through the year. M., 1; Tu. Th., 10. MR. VAN VALKENBURG

282b. *Geography of Anglo-America.* A systematic regional treatment of the physical, economic and cultural geography of the United States, Canada and Alaska.
Half course. Second semester. M. W. F., 9. MR. LOUGEE

283a. *Geography of Middle America.* Geographic background of the republics and islands of the Caribbean; analysis of selected important regions; increasing importance of the Caribbean area in commercial and political relations; detailed study of large scale maps.
Half course. First semester. M. W., 1 (one hour map lab.).
MR. WARMAN

283b. *Geography of South America.* Analysis of the major geographic regions; special geographic problems of Latin American governments; detailed study of topographic maps.
Half course. Second semester. M. W. F., 8. MR. WARMAN

291. *Cartography and Graphics.*
Through the year. Hours to be arranged. MR. BURNHAM

298. *Map and Aerial Photograph Interpretation.*
Through the year. Th., 3-5.
To be omitted in 1956-57.

3. PRIMARILY FOR GRADUATE STUDENTS

30. *Seminar.* Required of all graduate students.
Alternate Tuesdays 3. THE STAFF

32. *Regional Climatology.* A study of the climates of the world by major regional examples.
Two hours, through the year. Tu. Th., 8. MR. VAN VALKENBURG

33a. *Soils Geography.* A review of the development and character of soils, their distribution and economic significance, in the light of their geographical relationships.
Two hours, first semester. W., 2-4. MR. HIGBEE
Omitted 1956-57. To be offered 1957-58.

34. *Land Utilization and Planning.* An outline of relationships that physical and cultural factors bear to purpose and pattern of land uses, conservation of land resources, and basic elements of land planning.
Two hours, through the year. W., 2-4. MR. HIGBEE
Offered 1956-57. To be omitted 1957-58.

36. *Problems in Economic Geography.* An advanced study, emphasizing the various research fields of economic geography. Research methods and techniques in mining, agriculture, manufacturing and transportation are considered in detail.
Two hours, through the year. M. W., 10. MR. MURPHY

37a. *Human Geography.* A study of the influence and effect of location, area, relief, coastline, drainage systems, climate, and other geographic factors, separately and in their mutual interaction upon the economic, social and political development of peoples and states.
Half course. First semester. T. Th., 2. MR. WARMAN
(37a and 37b should be taken in the same year.)

37b. *Cultural Geography.* A summary of the role that geographic factors have played in the evolution of races and cultures, artifacts and institutions.
Half course. Second semester. Tu. Th., 2. MR. WARMAN

39. *Historical Background of Geography.* A series of lectures on European and American phases.
Hours to be arranged. THE STAFF
To be omitted in 1955-56.

300. *Ph.D. Seminar.* Alternate Tuesdays 3.
MR. VAN VALKENBURG

311b. *Oceanography.* The study of the Oceans from the standpoint of the great basins, their inherent characteristics and their economic worth. Non-credit course.
Hours to be arranged.
To be omitted in 1956-57.

314. *Regional Physiography of Western Hemisphere.* A study of selected areas within the major physiographic regions. Laboratory interpretation of maps, aerial photographs, block diagrams.
Two hours of lecture and two hours of laboratory weekly.
Through the year. Tu. Th., 9 (Th., 3-5 Lab.). MR. LOUGEE
To be omitted in 1956-57. Offered 1957-58.

315. *Regional Physiography of the Eastern Hemisphere.* A study of selected areas within the major physiographic regions. Laboratory interpretation of maps, aerial photographs, block diagrams.
Two hours of lectures and two hours of laboratory weekly.
Through the year. Tu. Th., 9 (Th., 3-5 Lab.). Mr. Lougee
To be offered 1956-57. Omitted 1957-58.

333b. *Biogeography.* Geographical significance of character, function, distribution, and relationships of plant and animal forms and societies in their adjustments to environment.
Two hours. Second semester. W., 2-4.
To be omitted in 1956-57. Offered 1957-58.

352. *Geography of American Agriculture.* An appraisal of the changing and changed pattern of agriculture in the United States including map revisions and most recent graphic materials available.
Through the year. T. W., 1. Mr. Higbee
To be omitted in 1956-57. Offered 1957-58.

361. *Urban Geography.* The modern city from the viewpoint of geography. Particular emphasis is placed on the American city.
Two hours. Through the year. Tu. Th., 11. Mr. Murphy

385a. *Geography of Europe.* Intensive survey of the continent and detailed study of selected regions.
Half course. First semester. Tu. Th., 1. Mr. Van Valkenburg

385b. *Geography of Asia.* An intensive study of the continent, region by region.
Half course. Second semester. Tu. Th., 1. Mr. Van Valkenburg

387b. *Geography of the Pacific Area.* A regional treatment of the human geography of the islands of the Pacific.
Offered when demand warrants. Mr. Murphy
To be omitted in 1956-57.

391b. *Cartographic Presentation of the Geographical Landscape.*
Half course. Second semester. Mr. Raisz

399a. *Field Methods and Studies.* Required of every graduate student.
First three weeks of every year. The Staff

RESEARCH COURSES

(Under direction of proper staff members)

200. *Geography in Education*
310. *Regional Physiography*

320. *Climatology*
330. *Soils and Biogeography*
340. *Land Utilization*
350. *Agricultural Geography*
360. *Economic Geography*
360b. *Urban Geography*
370. *Human Geography and Demography*
380. *Regional Geography*
390. *Political Geography*

Department of Geology

Professor Lougee

PRIMARILY FOR UNDERGRADUATES

12. *General Geology.* A course describing the structure and rock formations of the earth. In the first semester the emphasis will be placed upon the effect of forces at work on the earth's surface (Physical Geology); the second semester will deal with the evolution of landscapes through geologic time (Historical Geology).

Three lectures and one laboratory period or field excursion weekly.
Indivisible course.
Through the year. M. W. F., 8; Th., 2. Mr. Lougee

121a. *Introductory Mineralogy.* A course dealing with the identification of minerals by their geometric, physical, and chemical properties. Principles of Crystallography and techniques of analysis are also taught.

Half course. First semester. Two afternoon meetings weekly.
Omitted 1955-56.

122b. *Economic Geology.* A study of the major useful mineral deposits, their origin, structural relations and geographic distribution. Includes principles of Petroleum and Coal Geology.

Half course. Second semester. Two afternoon meetings weekly.
Omitted 1955-56.

Department of German

Professor Arndt, Associate Professor Edwards

REASONS FOR THE STUDY OF GERMAN

Nescire quid antea quam natus sis acciderit, id semper est esse puerum.
Cicero (106-43 B.C.)

Not to know what came to pass before you were born, is always to remain a child.

Wer nicht von dreytausend Jahren
Sich weiss Rechenschaft zu geben,
Bleib im Dunkeln unerfahren,
Mag von Tag zu Tage leben.
Goethe (1749-1832)

Whoever cannot account to himself for 3000 years of time, let him live from day to day, an inexperienced man groping in the dark.

Many centuries of a carefully fostered tradition of study, meditation, and research for the advancement of human learning have made the German language a great storehouse of information for almost all branches of human knowledge, and the soul of one of the greatest of Western cultures. For the intellectually curious American of our time, whether he plans a career as scientist, philosopher, theologian, professional soldier, technician, educator or public servant, the study of German will provide an almost indispensable insight into the intellectual, psychic, religious, political and economic life, especially of East and West Germany, Austria, and Switzerland, the crucial areas of past, present and future international conflicts, and the home of thousands of American soldiers for over a decade. As a command of the German language was considered one of the marks of an educated man in the time of the first flowering of New England, so it remains a most important study in our internationally far more complicated contemporary world.

DEPARTMENTAL OBJECTIVES

Out of an awareness of the important position of German areas for our country in peace or war, the Department of German offers a program of courses having the fourfold objective: 1, facility in the use of the German language (11, 12, 13, 132); 2, a comprehension of the outstanding cultural epochs in German history (141); 3, an integrated knowledge of major German writers and thinkers (152, 153, 162, 165); 4, an understanding of American and German relations in the past and present (200). Concentration in German as the mother tongue of the

Central European geographical areas, provides an indispensable background for an intelligent understanding of American interests in Europe, for work in international relations, and in most scientific fields.

COMPREHENSIVE EXAMINATIONS AND MAJORS

For the time being the department will not require comprehensive examinations, but each major in the Department will be required to complete certain extra-curricular reading assignments given in a departmental reading list designed to aid the student in reaching the fourfold objective outlined above. All students wishing to major in German should see the head of the department before they register.

EXTRA-CURRICULAR ACTIVITIES

The department sponsors the following organizations:

THE GERMANIC SOCIETY, an organization of students which provides an informal meeting ground for all those interested in the German language and culture. Its programs are regularly announced on the bulletin board and in the student newspaper.

DELTA PHI ALPHA, a chapter of the national honorary German fraternity. Outstanding students of German who have demonstrated their interest in the German language and culture may be invited to become members of the fraternity upon the nomination of the department.

Courses in German

During the academic year 1955-56 the following courses were given: 11, 12, 13, 162 and 165.

11. *Introductory German.* The regular first year course in German meeting three hours a week through the academic year. Study of pronunciation, vocabulary, elements of grammar, composition, and reading of suitable modern German prose.
Indivisible course.
Through the year. MR. ARNDT, MR. EDWARDS

12. *Intermediate German.* The regular second year course in German meeting three hours a week through the academic year. Review of first year grammar, translation from and into German, exercises in written and oral composition, reading of modern German prose.
Prerequisite: German 11 or two years of high school German.
Indivisible course.
Through the year. MR. ARNDT, MR. EDWARDS

13. *Advanced German Reading.* The regular third year course in German meeting three hours a week through the academic year. This course completes the undergraduate language requirement in German. In the first semester: reading of advanced German prose. In the second semester students will be introduced to the reading of contemporary scientific and literary German journals and newspapers.

Prerequisite: German 12.

Through the year. Mr. Arndt, Mr. Edwards

132. *Oral and Written German.* Practice in writing German letters, study of modern prose as a basis for practice in the oral use of the language. May be offered to complete language requirement in German.

Prerequisite: German 12.

Through the year.

141. *Germanic Civilization.* An illustrated lecture course in English on the literature, history, and the fine arts of the German lands from the Holy Roman Empire to the present day, with special stress laid upon the Reformation, the Age of Enlightenment and the Classical Period.

Through the year. Mr. Edwards

152. *German Literature I.* A survey of German literary movements from the earliest times to the end of the Classical Period.

Through the year. Mr. Arndt

Alternates with course 153.

153. *German Literature II.* A survey of German literary movements from the beginning of the Romantic Period to the present.

Through the year. Mr. Arndt

Alternates with course 152.

162a. *Faust.* Goethe's *Faust* (both parts) as the highest poetic development of the Faust legend.

Half course. First semester. Mr. Arndt

165. *Modern German Drama.* The German drama from 1880 to the present.

Half course. Second semester. Mr. Arndt

200b. *German Seminar.* For German majors in their senior year. The work of the seminar will vary from year to year according to the needs of the students.

Half course. Second semester. Mr. Arndt

Department of History, Government and International Relations

Professor Lee, Professor Jordan, Associate Professor Hayden, Associate Professor Campbell, Associate Professor Cohen,* Assistant Professor Raeff, Mr. Webb

UNDERGRADUATE WORK

In its undergraduate program the department gives basic courses in the fields of American, European, and British history, American and European government, and international relations. It offers departmental majors in history or government, and participates in the interdepartmental major programs: International Relations and American Civilization.

General Education 14 must be taken as early as possible by all majors in the department. Other courses primarily for undergraduates may be elected by non-majors who have not previously taken G.E. 14; and courses for advanced and graduate students may be taken by non-majors with the permission of the instructor if in his judgment the student has an adequate background for the course. Majors will normally take Economics 11 as well as G.E. 14 before the end of the sophomore year. Majors in government will normally take Government 15 before the end of the sophomore year. Further elections in this and related departments are determined by the major's special interests, but are expected to include at least two upper class courses in this department. In addition, History 20b is required of all senior majors as partial preparation for the comprehensive examinations given by the department in accordance with the program voted by the faculty.

GRADUATE WORK

The distinctive feature of the graduate work is the emphasis laid upon individual instruction and guidance by means of informal conferences between instructor and student, small classes, and seminars. The principal fields of graduate study are American, English and European history and politics, modern diplomacy, and the international relations of the United States, Europe, the British Empire and the Far East.

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*Absent on leave.

The program for the degree of Master of Arts is worked out individually with each student who may choose to concentrate upon history, or government, or international relations. All are required to take the departmental seminar (History 30). For general requirements, see the announcement of the Graduate School.

For the degree of Doctor of Philosophy, which may be taken in history or international relations, each student must choose six fields of study to be agreed upon as early as possible in the first year of residence beyond the M.A., and after a conference between the student and the departmental staff. By the end of the same year the student is expected to complete satisfactorily two of his fields, either by course work or by passing a three-hour written examination in each field; and to complete, normally by enrollment in a seminar or similar course, a task of research and writing. In the second year beyond the M.A., or later, the student must complete the remaining four fields, one or two by course or written examination, and the others by an oral examination given by the staff and at least one member of the Graduate Board from another department. This final step constitutes the "preliminary examination" required by the Graduate Board. For language and other requirements, see the announcement of the Graduate School concerning the doctorate.

The doctoral dissertation, written in one of the six fields which is designated as the special field, must be submitted in complete preliminary draft to the supervising instructor not later than March 1 of the year in which the candidate hopes to receive the degree. The final examination for the doctorate tests the candidate's expert knowledge of his special field as well as the relation of his dissertation to it.

International Relations. The procedures toward advanced degrees in this subject are outlined above. Candidates are expected, however, to take work in economics and geography as part of an integrated program to be arranged by the department in consultation with the other departments concerned.

Courses in History

During the academic year 1955-56 the following courses were given: General Education 14, History 20b, 205a, 205b, 21, 211, 225b, 23, 230, 234a, 235a, 274b, 281a, 282b, 30, 314a, 331.

1. PRIMARILY FOR UNDERGRADUATES

General Education 14. Europe and the United States since 1500. For a complete description of this course, see *General Education.*
Required of all majors in the department.
Through the year. Tu. Th., 9; F., 1.

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

20b. *Senior Conference.* Required of all seniors as part of their preparation for the comprehensive examinations. A list of required readings forms the basis for discussion which is intended to correlate and review the fields of history and government.
Half course. Second semester. M., 3:25-4:40. MR. LEE AND STAFF

205a. *Introduction to Political Philosophy.* A study of the main trends of Western political thought with reference to their underlying social, political and economic realities.
Half course. First semester. T. Th., 8; F., 2. MR. JORDAN

205b. *Recent Political Thought.* The conflicting ideologies of our time in their development since the French Revolution. Marxism, Fascism, and Nazism will be analyzed with especial reference to their challenge to liberal democracy.
Half course. Second semester. T. Th., 8; F., 2. MR. JORDAN

21. *Foundations of Modern Europe.* Following an introductory survey of medieval history, the course will emphasize the Renaissance and Reformation to the second half of the 16th century.
Through the year. M. W., 2-3:15. MR. LEE AND MR. RAEFF
Offered in alternate years. To be omitted 1956-57.

210b. *Europe in the Revolutionary Era (To 1830).* Concentrates upon the background, course, and consequences of the French Revolution in its European setting.
Half course. Second semester. Tu. Th., 3:25-4:40. MR. LEE
Offered in alternate years. Omitted in 1955-56.

211. *Europe since 1830.* The development of the major European nations with special emphasis on the period from 1870 to the present.
Through the year. T. Th., 10-11:15. MR. LEE
Offered in alternate years. To be omitted 1956-57.

22b. *Tudor and Stuart England.* A survey of the period from 1485 to 1688 with particular attention to the social backgrounds of

English literature and to the conditions leading to colonization of America.
Half course. Second semester. Mr. Jordan
Omitted in 1955-56.

221. *England since 1760.* A general course, stressing the political, economic and social development of the modern commonwealth.
Through the year. Mr. Jordan
Omitted in 1955-56.

225b. *Recent History of the British Empire.* The course will deal with developments and problems since 1900.
Second semester. T. Th., 9; F., 1. Mr. Jordan
Offered in alternate years.

23. *Senior Conference in American Civilization.* Required of all seniors as part of their preparation for the comprehensive examinations in American Civilization. Readings, papers and discussions will help the students review and integrate their course work in this field.
Half course. Second semester. Th., 3-5. Mr. Campbell

230. *Social and Intellectual History of the United States.* Beginning with a brief survey of the European background of American ideas and institutions, this course deals with the main currents in American thought and society from colonial times to the present.
Through the year. M. W. F., 11. Mr. Campbell

232. *United States Constitutional History and Law.* A survey of the major developments in our constitutional system and law with emphasis in the second semester upon contemporary problems.
Prerequisite: History 131 or Government 15.
Through the year. Mr. Campbell and Mr. Cohen
Offered in alternate years. Omitted in 1955-56.

234a. *American Diplomatic History.* The history of the foreign relations of the United States from 1783 to about 1941.
Half course. First semester. M. W. F., 9. Mr. Hayden
Offered in alternate years. To be omitted 1956-57.

235a. *The United States in the Twentieth Century.* A study of the chief influences in American civilization since 1900, with special attention to the emergence of current social and economic problems.
Half course. First semester. M. W. F., 9. Mr. Campbell
Offered in alternate years. To be omitted 1956-57.

274b. *The Modern Far East.* The course deals primarily with international relations in the region since 1895.
Half course. Second semester. M. W. F., 9. Mr. Hayden
Offered in alternate years. To be omitted 1956-57.

281a. *History of Russia (Since 1700).* From the origins of the modern Russian empire to the Revolution of 1917. Special attention is given to the development of Russian society and the ideological preparation of the Revolution.
Half course. First semester. M. W. F., 10. MR. RAEFF

282b. *History of the Soviet System.* Major emphasis is laid on the process of consolidation and transformation of the Soviet system after its establishment in 1917. The last part of the course deals with developments since 1941, with special reference to the sovietization of Eastern Europe and China.
Half course. Second semester. M. W. F., 10. MR. RAEFF

283. *Historical Development of Eastern Central Europe.* Traces the development and character of the social, political, and cultural factors which have entered into the making of the area lying between Germany and Russia.
Through the year. MR. RAEFF
Omitted in 1955-56.

3. PRIMARILY FOR GRADUATE STUDENTS

30. *Department Seminar.* Introduction to bibliography and methods of research, and discussion of research problems being investigated by graduate students and faculty.
Required of all first-year graduate students in the department.
Half course. First semester. W., 4-6. MR. LEE AND THE STAFF

311b. *European Intellectual History.* A study of currents of thought in the 19th century.
Half course. Second semester. MR. JORDAN AND MR. RAEFF
Omitted 1955-56.

314a. *European International Relations, 1870-1918.* A study of the diplomatic history of Europe from the Franco-Prussian War to the First World War.
Half course. First semester. M., 3:30-5:30 MR. LEE

321a. *England in the Twentieth Century.* The development of the United Kingdom from the time of its greatest power to its present struggle to maintain a world position.
Half course. First semester. M., 3. MR. JORDAN
Omitted in 1955-56.

331. *Problems in the History of the United States.* Individual research topics, supplemented by readings and discussion in the field of United States history.
Through the year. Tu., 3-5. MR. CAMPBELL

GRADUATE READING AND THESIS COURSES

31. *Reading* 310. *Thesis*	*In the History and International Relations of Europe.*	Mr. Lee
32. *Reading* 320. *Thesis*	*In the History and International Relations of England and the British Empire.*	Mr. Jordan
33. *Reading* 330. *Thesis*	*In the History of the United States.*	Mr. Campbell
38. *Reading* 380. *Thesis*	*In Early Modern and Slavic History.*	Mr. Raeff

Courses in Government

During the academic year 1955-56, the following courses were given: Government 15, 24, 240, 25a and 252b.

1. PRIMARILY FOR UNDERGRADUATES

15. *Introduction to American Government.* A short survey of the theories of the origin and purpose of the state is followed by a study of the functioning of the government of the United States with emphasis on contemporary problems of the federal government.
Through the year. M. W. F., 9. Mr. Webb and Mr. Glennon

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

24. *International Relations.* A survey of the course of world politics since 1914, with emphasis on the shifting patterns of power and the rise of new nations and revolutionary doctrines. Special attention is given in the second semester to the Second World War and its consequences.
Through the year. Tu. Th., 9; F., 1. Mr. Hayden

240. *Seminar in International Relations.* Group study of certain problems in contemporary affairs. Required of seniors in the international relations major; open as an elective only with the instructor's permission.
Through the year. Tu., 3:20, and conferences. Mr. Hayden

241. *International Law and Organization.* First semester: the historic principles of international law and their application in the modern world. Second semester: an examination of the institutions

created to deal with problems of commerce, social welfare, and collective security on an international basis.
Through the year. Mr. Hayden
Offered in alternate years. Omitted in 1955-56.

25a. *Comparative Government.* The governments and politics of Great Britain and the major European powers.
Half course. First semester. M. W. F., 11. Mr. Webb
Offered in alternate years. To be omitted 1956-57.

251a. *American Political Parties.* A study of the functioning of American party organizations, pressure groups, and the electorate in American politics. Emphasis is placed upon current problems and trends in the field.
Half course. First semester. M. W. F., 10. Mr. Cohen
Offered in alternate years. Omitted in 1955-56.

History 232. United States Constitutional History and Law. See courses in History. Mr. Campbell and Mr. Cohen

252b. *Introduction to Public Administration.* An introductory examination of the role of administration in modern government, including problems of personnel administration, fiscal management, administrative regulation and government organization.
Half course. Second semester. M. W. F., 11. Mr. Webb
Offered in alternate years. To be omitted 1956-57.

3. PRIMARILY FOR GRADUATE STUDENTS

History 30. *Department Seminar.* See courses in History.

351. *Problems in American Government.* A study primarily by means of student research and discussion of selected contemporary problems in American government, including the legislative process, public opinion, and political parties.
Through the year. Hours to be arranged. Mr. Cohen
Omitted in 1955-56.

GRADUATE READING AND THESIS COURSES

34. 340.	*Reading* *Thesis*	*In International Relations.*	Mr. Hayden
35. 350.	*Reading* *Thesis*	*In American and Comparative Government and Politics.*	Mr. Webb

Interdepartmental Majors

To provide undergraduate "majors" in certain fields which are intrinsically worthwhile culturally or professionally but which cross departmental boundaries, the Faculty has authorized a group of "interdepartmental majors."

At present two programs are offered under this plan:

I. International Relations

II. American Civilization

A description of these majors will be found at the beginning of the section "Departments and Courses" in this catalog, immediately after the introductory statements.

International Relations

See the announcement of the Department of History, Government and International Relations.

An "interdepartmental major" in the field of International Relations is offered to candidates for the degree of Bachelor of Arts. The program required for the completion of this major is fully outlined under the earlier heading *Interdepartmental Majors.*

Department of Mathematics

Professor Bumer, Associate Professor Stubbe,
Associate Assistant Professor Gorenstein

UNDERGRADUATE WORK

The department of mathematics offers courses leading to an undergraduate major in mathematics, courses necessary for the study of the physical sciences and courses for the student who wishes to learn about the fundamental concepts of mathematics primarily for their cultural value.

Courses 11, 12, 13 and 214 form the basis of a major in mathematics and are important for the study of the physical sciences. A major in mathematics normally includes one course in mathematics in addition to the four courses above and two courses in an allied field of study such as physics, chemistry or philosophy.

GRADUATE WORK

The department offers advanced courses leading to the degree of Master of Arts. The program in mathematics is designed to give the student an understanding of the basic concepts of the major fields of mathematics and to fit him for further work in the subject if his talents warrant it.

The offerings should provide the student with essential training in mathematics necessary for positions in the scientific laboratories of government and industry and should be of great value to teachers.

Graduate assistantships are available.

Courses in Mathematics

During the academic year 1955-56 the following courses were given: Mathematics 11, 12, 13, 17, 215, 216 and Business Administration 13.

1. PRIMARILY FOR UNDERGRADUATES

11. *Freshman Mathematics.* Course 11 has for prerequisites one course in algebra and one course in plane geometry taken in the secondary schools, although at least three courses in secondary school mathematics are advisable. Careful attention is given to fundamental concepts and to the development of useful techniques. Topics in algebra, trigonometry and analytic geometry are introduced.

A qualified student may request permission to take an attainment test in the subject matter of course 11. If he passes such a test he may enter course 12.

Through the year. M. W. F., 9; M. W., 2; F., 3; Tu. Th., 10; M., 1.
Mr. Stubbe, Mr. Gorenstein

12. *Calculus.* Course 12 introduces both the differential and integral calculus and is essential to further work in mathematics as well as to work in the natural sciences.

Prerequisite: Course 11 or its equivalent.

Through the year. M. W. F., 9; Tu. Th., 10; M., 1.
Mr. Stubbe, first semester; Mr. Bumer,
second semester; Mr. Gorenstein

13. *Intermediate Calculus and Differential Equations.* This course includes a discussion of geometric and physical applications of integration, sequences and series, partial differentiation and double integrations; also, ordinary differential equations, with emphasis on the principal types of first and second order equations. Applications to geometry, physics, chemistry, and mechanics are stressed.

Prerequisite: Course 12.
Through the year. M. W. F., 10. MR. BUMER

17. *Mathematical Statistics.* Topics discussed include frequency distributions, moments, tests of significance, correlation theory of large and small sampling. Although numerous applied problems are worked out in detail by the students, emphasis is placed on the mathematical theory.

Prerequisite: Course 12.
Through the year. M. W. F., 11. MR. BUMER
Offered in alternate years. Offered 1955-56.

General Education 110. Fundamental Concepts of Elementary Mathematics.

For description of this course, see courses listed under General Education.

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

214. *Advanced Calculus.* The following topics are among those studied: complex numbers, partial differentiation, infinite series, vector analysis, multiple and line integrals. Some emphasis is placed on the uses to which the topics can be put in the sciences and engineering.

Prerequisite: Course 12.
Through the year. Omitted in 1955-56. Tu. Thu., 11-12:15.
MR. BUMER

215. *Modern Algebra.* The course affords an introduction to modern algebraic systems: groups, integral domains, rings, fields, abstract vector spaces, matrices and related topics. The emphasis is on developing in the student the modern axiomatic point of view, with considerable attention given to the nature and construction of formal proof.

Prerequisite: Course 12.
Through the year. M. W. F., 11. MR. GORENSTEIN
Offered in alternate years. Offered in 1955-56.

216a. *Introduction to Complex Variables.* The course affords an introduction to analytic functions, line integrals, conformal mapping.

Considerable attention is given to rigor and many examples are studied to illustrate applications.

Prerequisite or taken concurrently: Course 214.
Half course. First semester. T., 10; M. W., 1. MR. BUMER
Offered in alternate years. Offered in 1955-556.

216b. *Advanced Differential Equations.* Some partial differential equations of mathematical physics, Fourier Series and boundary value problems, systems of ordinary differential equations are studied.

Prerequisite: Course 13.
Half course. Second semester. T. Th., 10; M., 1. MR. STUBBE
Offered in alternate years. Offered in 1955-56.

218. *Introduction to Analysis.* The following topics are studied: the structure of the real number system, algebra of sets, cardinality, sequences and series and certain theorems concerning functions of a real variable. An introduction is made to the study of measure and the Lebesgue integral.

Prerequisite: Course 12.
Through the year. Tu. Th., 2-3:15.
THE STAFF
Offered irregularly. Omitted 1955-56.

219. *Solid Analytic Geometry and Projective Geometry.* Topics of three-dimensional analytic geometry discussed are: planes and lines, matrices, determinants, transformation of coordinates and quadric surfaces. Topics of projective geometry studied are: postulates for projective geometry, homogeneous coordinates, principle of duality, cross ratio, projective transformations and projective theory of curves of the second degree.

Prerequisite: Course 12.
Through the year. M. W. F., 9. MR. GORENSTEIN
Offered in alternate years. Omitted in 1955-56.

Department of Philosophy

PROFESSOR JEFFERSON, ASSISTANT PROFESSOR BECK, MR. SCHLAGEL

The Department of Philosophy offers courses designed to broaden the student's perspective and help him trace the relations among the various fields of knowledge. These courses may also form the basis of a major in philosophy.

A major in this department consists of four courses in philosophy and three additional courses in related fields. The specific courses in related fields are determined in the light of the students' special interests.

Courses in Philosophy

During the academic year 1955-56 the following courses were given: 11a, 11b, 12, 14a, 16a, 16b.

Philosophy 11a. Logic and Scientific Method. The principles of valid reasoning and inductive methods; the application of these principles and methods to the problems of the natural and social sciences, and the consideration of the relation between logic and problems of value.

Open to freshmen.
Half course. First semester. M. W. F., 8. MR. SCHLAGEL

Philosophy 11b. Problems of Philosophy. The nature and method of philosophy. The application of philosophical method to contemporary personal and social problems. A detailed analysis of some typical problems in the various fields of philosophy.

Open to freshmen.
Half course. Second semester. M. W. F., 8. MR. SCHLAGEL

Philosophy 12. History of Philosophy. The movements of philosophical thought from the early Greeks to the present day. First semester: Greek and Medieval Philosophy. Second semester: Modern Philosophy.

Not open to freshmen.
Divisible course, with consent of the instructor.
Three hours, through the year. M. W. F., 9. MR. JEFFERSON

Philosophy 13a. Problems of Ethics. A constructive study of important ethical theories. Designed to acquaint the student with the problems and scope of ethics, and to aid him in the formulation of an ethical outlook.

Open to juniors and seniors.

Half course. First semester. W. F., 11. Mr. Beck

Offered in alternate years. Omitted in 1955-56.

Philosophy 13b. Types of Religious Philosophy. The religious ideas and ideals of Western civilization and their embodiment in specific religious institutions.

Open to juniors and seniors.

Half course. Second semester. W. F., 11. Mr. Beck

Offered in alternate years. Omitted in 1955-56.

Philosophy 14a. Social Philosophy. The principles underlying social structure and functions. The examination of the goals, purposes, norms, and ideals of social process, and the relation of that process to the individual good.

Open to juniors and seniors.

Half course. Second semester. W. F., 11. Mr. Schlagel

Offered in alternate years. To be omitted 1956-57.

Philosophy 15. Contemporary Philosophy. An intensive study of important thinkers representative of modern developments in philosophy, together with emphasis on the historical roots of their thought.

Prerequisite: One and one-half courses in philosophy, including Philosophy 12; or permission from the instructor.

Divisible course.

Through the year. Tu. Th., 2. Mr. Beck

Offered in alternate years. Omitted 1955-56.

Philosophy 16a. Readings in Ancient Philosophy. Advanced work in the writings of one or more of the important philosophers of the ancient period. Subject for 1955-56, Aristotle.

Prerequisite: One and one-half courses in philosophy, including Philosophy 12; or permission from the instructor.

Half course. First semester. M. W., 2. Mr. Schlagel

Offered in alternate years. To be omitted 1956-57.

Philosophy 16b. Readings in Modern Philosophy. Advanced study of representative thinkers of the modern period. Subject for 1955-56, Kant.

Prerequisite: One and one-half courses in philosophy, including Philosophy 12; or permission from the instructor.

Half course. Second semester. M. W., 2. Mr. Schlagel

Offered in alternate years. To be omitted 1956-57.

Education 290b. Philosophy of Education described in the announcement of the Department of Education.

Department of Physics

PROFESSOR ROOPE, ASSOCIATE PROFESSOR GUNTER

UNDERGRADUATE WORK

The department offers fundamental courses required in preparation for the study of chemistry, biology, meteorology and allied sciences, medicine, dentistry, engineering and science teaching, as well as courses leading to professional or graduate work in physics.

The requirement for a major in physics consists of Physics 11, two courses from Physics 15, 16, 17, 124, either Physics 22 or 23, Mathematics 11 and 12, and Chemistry 11. In addition, electives in physics, mathematics and chemistry are desirable. Students preparing for graduate work should also obtain a good reading knowledge of French and German while in college.

Physics 11 or its equivalent is the normal prerequisite for all other courses in the department. Courses numbered 15 or higher, except 17 and 124, require the use of calculus and should not be elected without consulting the instructor in charge. Courses 15, 17 and 23 each require a limited amount of laboratory work to be done at the discretion of the instructor and at such times as will not interfere with regularly scheduled courses.

GRADUATE WORK

Students whose records are approved by the department may be admitted by the Graduate Board to work leading to the degree of Master of Arts.

Courses in Physics

During the academic year 1955-56 the following courses were given: 11, 15, 16, 17, 23, 24, 25, 31, 217 and General Education 10.

During the academic year 1956-57 the following undergraduate courses will be offered: 11, 17, 124, 22, 28a, 28b, and General Education 10.

1. PRIMARILY FOR UNDERGRADUATES

General Education 10. An Introduction to Physical Science. For description of this course see courses listed under General Education.

11. *General Physics.* Mechanics, heat, electricity and magnetism, wave motion, sound, and light.

Indivisible course.

Open to freshmen.

Through the year. Tu. Th., 9; F., 1; Th., 2. MR. GUNTER

13. *History of Physics.* Mr. Roope
Omitted 1955-56.

15. *Heat and Thermodynamics.* This course includes a study of thermometry, calorimetry, the thermal properties of matter in the solid, liquid and gaseous states, the laws of thermodynamics, and applications to a wide range of phenomena.
Prerequisites: Physics 11 and Mathematics 12.
Through the year. M. W. F., 11. Mr. Roope
Offered in 1955-56. To be omitted 1956-57.

16. *Optics.* The first semester is devoted to a study of the principles of geometrical optics and their application to various optical instruments, including ground and aerial cameras. The second semester is devoted to the principles and application of physical optics.
Prerequisites: Physics 11 and Mathematics 12 (may be taken concurrently).
Through the year. Tu. Th., 8; Tu., 2. Mr. Gunter
Offered in 1955-56. To be omitted 1956-57.

17. *Introduction to Modern Physics.* An elementary treatment of physical experiment and theory of the past sixty years including the more recent atomic and nuclear developments.
Through the year. M. W. F., 9. Mr. Roope

124. *Fundamentals of Electronics.* This is a first course in electronics designed to give a broad, largely non-mathematical, background for the understanding of electron tubes and their associated circuits. The application of modern electronic devices to the fields of physics, chemistry, biology, meteorology, and navigation is discussed.
Prerequisite: Mathematics 11.
Through the year. Tu. Th., 8; Tu., 2. Mr. Gunter
Omitted in 1955-56. To be offered in 1956-57.

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

22. *Theoretical Mechanics.*
Prerequisite: Mathematics 12. Mathematics 13 is desirable but not required.
Through the year. W. F., 11-12:15. Mr. Roope
Omitted in 1955-56. To be offered in 1956-57.

23. *Electricity and Magnetism.* The fundamental laws of electric and magnetic circuits and fields are treated. The elements of electromagnetic wave propagation and their application to antenna design are included in this treatment.

Prerequisites: Physics 11 and Mathematics 12. Mathematics 13 is desirable but not required.

T. Th., 11-12:15. Laboratory hours to be arranged. MR. GUNTER

Offered in 1955-56. To be omitted in 1956-57.

24. *Advanced Electronics.* This course is a detailed theoretical study of certain electronic phenomena from a mathematical point of view.

Prerequisites: Mathematics 12 and Physics 124 or Physics 23. Mathematics 13 is desirable but not required.

Through the year. MR. GUNTER

Offered in 1955-56. To be omitted in 1956-57.

28a. *Theoretical Spectroscopy.* The origin of line and band spectra in both emission and absorption spectrophotometry is treated.

Prerequisites: Physics 11 and Mathematics 12 (may be taken concurrently). Physics 16 and 17 are desirable but not required.

Half course. First semester. MR. GUNTER

Omitted in 1955-56. To be offered in 1956-57.

28b. *Experimental Spectroscopy.* The theory and applications of the optical and electrical instruments used in an experimental spectroscopy are discussed. The student will become familiar with the use of prism and grating spectrographs, micro-densitometers, interferometers, and their associated photographic and electrical techniques. The principles of spectrochemical analysis are included in this course.

Prerequisites: Physics 16 or Physics 28a, and Mathematics 12 (may be taken concurrently). Physics 17 is desirable but not required.

Half course. Second semester. Tu., 11; Tu. Th., 2. MR. GUNTER

Omitted in 1955-56. To be offered in 1956-57.

25. *Honors Course.* Theoretical and/or experimental work in mechanics, thermodynamics, or nuclear physics. MR. ROOPE

26. *Honors Course.* Theoretical and/or experimental work in optics, electronics, or spectroscopy. MR. GUNTER

217. *Nuclear Physics.* MR. ROOPE

3. PRIMARILY FOR GRADUATE STUDENTS

31. *Theoretical Physics.* Double Course. MR. ROOPE

300. *Research in Experimental Physics.* THE STAFF

301. *Research in Theoretical Physics.* THE STAFF

Department of Psychology

PROFESSOR WERNER, PROFESSOR AFFILIATE WEINREB, ASSOCIATE PROFESSOR BELL, ASSOCIATE PROFESSOR DEMBO, ASSOCIATE PROFESSOR GWINN, ASSOCIATE PROFESSOR LAZARUS, ASSOCIATE PROFESSOR WAPNER, ASSOCIATE PROFESSOR AFFILIATE MEYER-TAYLOR, ASSOCIATE PROFESSOR AFFILIATE PHILLIPS, ASSISTANT PROFESSOR BAKER, ASSISTANT PROFESSOR KAPLAN, ASSISTANT PROFESSOR AFFILIATE LEVENTHAL, LECTURER LANE, LECTURER PRIBRAM, LECTURER VARJABEDIAN, LECTURER WEIR

The Psychological laboratories at Clark University were established by G. Stanley Hall immediately after the founding of the University, and constituted one of the first adequately appointed laboratories in this field in America. These laboratories increased rapidly in size and in research possibilities for experimental psychology, and have been remodeled in accordance with present needs. From the outset this research emphasis on experimental psychology was supplemented by work in child study, educational psychology, and mental hygiene. In recent years a comprehensive training program in clinical psychology has been added. Broad integrated training in psychology is stressed, with special concentration being provided in the areas of child and genetic, clinical, and general experimental psychology.

UNDERGRADUATE WORK

The undergraduate curriculum is designed to meet the needs of: (1) students majoring in psychology; (2) majors in related fields; (3) students wishing an orientation to the field of psychology for general cultural development.

Psychology 11a and 11b are prerequisite to all subsequent courses, with the exception of Psychology 190b. Majors are required to take Psychology 11a, 11b, and Psychology 212. Students preparing for graduate work should obtain a reading knowledge of French and German.

GRADUATE WORK

Work is offered in the department leading to the degrees of Master of Arts and Doctor of Philosophy. In order to be admitted to the department for a graduate degree, the applicant must have a bachelor's degree based upon a distinguished college record. Where the department feels that a student lacks the necessary undergraduate preparation in psychology and related fields, specific courses of study will be prescribed.

THE DEGREE OF MASTER OF ARTS. To qualify for the degree of Master of Arts in psychology the student must demonstrate competence in representative areas of psychology. The customary program is five courses, including experimental psychology, statistical methods, and three additional courses supplemented by the writing of a thesis in the area of special interest.

THE DEGREE OF DOCTOR OF PHILOSOPHY. Only students who give evidence of high scholastic attainments will be encouraged to proceed to the degree of Doctor of Philosophy. The obtaining of a Master of Arts degree does not automatically admit the student to the doctoral program. The general requirements for the doctor's degree, other than those for specialization in clinical psychology, include the following. The student is required to pass with distinction four courses during the first year of graduate study and a minimum of four courses during the second year of study. At the end of the second year he is required to demonstrate his competence in psychology by passing with distinction preliminary examinations in the field of psychology as a whole and in an area of specialization. At the present time examinations in the general field include history and systems of psychology, experimental psychology, genetic psychology, learning, normal and abnormal personality, and statistics. In addition, the student is required to demonstrate his ability to conduct independent research as evidenced by the presentation of an acceptable thesis. For formal thesis requirements and language requirements, see the general statement concerning advanced degrees in the section of this catalog headed "The Graduate School." At a final oral examination a student is required to defend his thesis and to show his competence in the general field of psychology and in his special area of concentration.

THE PROGRAM IN CLINICAL PSYCHOLOGY. The department offers a four-year program in clinical psychology leading to the degree of Doctor of Philosophy. For this degree the same standards of proficiency in the general field of psychology as mentioned above apply.

In addition the student will be required to demonstrate mastery of the use of clinical methods. Provision is made for a wide variety of practical experiences in cooperating institutions, clinics, and agencies.

V.A. and U.S. Public Health Service Training Stipends are available for outstanding students.

One to two years of internship, or its equivalent, is included in this four-year program. Institutions and agencies cooperating in providing practicum and research facilities are: Bradley Home, Bedford V.A. Hospital; Boston State Hospital; Boston V.A. Hospital; Boston V.A. Mental Hygiene Clinic; Brockton V.A. Hospital; Children's Medical Center, Boston; Clark University Psychological Clinic; Hartford V.A. Mental Hygiene Clinic; Judge Baker Guidance Center, Boston; Lowell V.A. Mental Hygiene Clinic; Northampton V.A. Hospital; Providence V.A. Mental Hygiene Clinic; Worcester Boys' Club; Worcester Girls' Club; Worcester Youth Guidance Center; and the Worcester State Hospital. Internships may be arranged in other selected hospitals and clinics.

During the first two years the student will include in his program courses basic to a thorough understanding of psychology as well as specialized courses in clinical psychology. He will be required to take the regular preliminary examinations; in this case the examination in the area of specialization will be in clinical psychology.

Research for the dissertation should normally be completed during the fourth year at the University. The length of the program will vary depending upon individual circumstances.

1. PRIMARILY FOR UNDERGRADUATES

11a. *General Psychology.* An introduction to the principles of human behavior.

Half course. First semester. M. W. F., 10. MR. WAPNER

11b. *General Psychology.*

Prerequisite: Psychology 11a.

Half course. Second semester. M. W. F., 10. MR. WAPNER

172b. *Personality Development.* A survey of the various theoretical approaches to the study of personality, with particular emphasis on trait theories, typologies, field theory, and psychoanalysis. Also considered are the determinants of personality development and methods of appraising personality.

Half course. First semester. Tu. Th., 2-3:15. MR. BELL

190b. *Applied and Industrial Psychology.* The application of psychological techniques to the problems of business and industry.

Prerequisite: Psychology 11a.

Half course. Second semester.

198a. *Physiological Psychology.* Physiological methods of investigating the mechanisms underlying psychological processes.
Half course. First semester. Mr. Gwinn
Omitted 1956-57.

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

170a. *Social Psychology.* The role of social factors in the behavior of individuals and of groups. Among the topics to be discussed are suggestion, attitudes, rumor, prejudice, leadership and public opinion polls.
Half course. Second semester. Tu. Th., 8:35-9:50. Mr. Lazarus

201a. *Learning and Motivation.* The role of learning and motivation in behavior.
Half course. First semester. Tu. Th., 10-11:15. Mr. Gwinn

202b. *The Psychology of Thinking.* An analysis of the various types of thought processes and methods of investigating them, with emphasis on concept formation, imagination, creative thought, reasoning and problem solving.
Half course. Second semester. Tu. Th., 10-11:15. Mr. Gwinn

203a. *The Abnormal Personality.* The course will be devoted to a study of the development of the abnormal personality and a survey of the major types of abnormal behavior.
Prerequisite: Psychology 172a.
Half course. Second semester. Tu. Th., 2-3:15. Mr. Bell

204b. *Personality Evaluation.* The purpose of this course is to provide an understanding of the principles, problems, and procedures of personality evaluation. It will include consideration of the nature of personality and its measurement, intelligence and its defects, and diagnostic testing designed to explore personality dynamics.
Half course. First semester. Tu. Th., 8:35-9:50. Mr. Lazarus

209. *Developmental and Child Psychology.* A survey of the principles of development and the problems of child psychology.
Prerequisite: Psychology 11 plus one additional semester course in psychology.
Through the year. W. F., 9. A third hour to be arranged.
Mr. Werner

212. *Experimental Psychology.* A general survey of experimental psychology with the aim of acquainting the student with scientific methods and laboratory technique.
Through the year. Lecture: M. W., 11.
Laboratory: M., 2-5. Mr. Wapner

3. PRIMARILY FOR GRADUATE STUDENTS

300. *Genetic Psychology.* A seminar on the basic principles of genetic psychology.
Through the year. F., 10-12. Mr. Werner and Mr. Kaplan

301. *Clinical Methodology.* An introduction to problems and methods.
Through the year. F., 1-3. Mr. Leventhal

302b. *Advanced Psychological Diagnosis of Children.* Special problems and case studies.
Half course. Second semester. Hours to be arranged.
Omitted in 1955-56. Mrs. Meyer-Taylor

303a. *Diagnosis of Personality* (Advanced Course).
Prerequisite: Psychology 301.
First semester. W., 3-5. Mr. Bell

303b. *Theories of Psychotherapy.* A comparative study of basic theories of psychotherapy.
Prerequisite: Psychology 303a.
Second semester. W., 3-5. Mr. Bell

305. *Advanced Experimental Psychology.* A study of experimental methodology and techniques. In the first semester attention will be given to problems of perception, and, in the second semester, to memory, concept formation and reasoning.
Through the year. Lecture: Th., 9-11. Mr. Werner
Laboratory: To be arranged. Mr. Werner and Mr. Wapner

306. *Seminar in Research Methods.*
Through the year. Tu., 9-11.
Mr. Werner, Mr. Kaplan, and Mr. Wapner

307. *Participation in Psychological Clinic.*
Through the year. F., 3-5. Mr. Bell and Mr. Lazarus

313. *Statistical Methods.* The purpose of this course will be to give an understanding of and practice in the statistical methods most valuable in psychological research.
Through the year. Tu., 4-6. Mr. Lane

315a. *Experimental Methodology and Design.* A consideration of general experimental methodology in psychology with special reference to the problems of research planning and experimental design. Various fields will be drawn upon for illustrations.
First semester. W., 1-3. Mr. Wapner

318. *Personality.* Emphasis will be placed on the dynamics common to both normal and abnormal manifestations of personality. The first part of the course will consist of a consideration of personality theory and the methodology of personality research. The latter part will be devoted to a survey of the main types of abnormal behavior, including psychoses, and psychoneuroses, and will provide demonstrations of these and other disorders.
Through the year. Th., 10-12. MR. LAZARUS

330a. *Psychology of Language Behavior.* A seminar on basic problems pertinent to the experimental study of language.
Half course. First semester. MR. WERNER
Omitted 1955-56.

330b. *Genetic Psychology of Symbolic Behavior.* A seminar on the basic aspects of symbolic behavior in humans.
Half course. Second semester. F., 2-4. MR. KAPLAN
Omitted 1955-56.

331. *The Psychology of Learning.* Theoretical viewpoints and experiments in the field of learning.
Through the year. W., 5-7. MR. GWINN

333. *Personality Evaluation.* An advanced course in the integration of methods of personality diagnosis and case history materials.
Through the year. F., 5-7. MR. PHILLIPS

334b. *Advanced Problems in Social Psychology.* A seminar on emotional and value aspects of interpersonal relationships. Emphasis is placed on experimental methodology and on the development of theoretical concepts.
Half Course. Second Semester. Th., 7-9 P.M. MISS DEMBO

335b. *Social Psychology.* Topics to be considered in this course are: Opinion Research; Propaganda, Rumor; Group Dynamics; Orientation and Theoretical Problems in Social Psychology.
Omitted 1955-56.

336. *Advanced Problems in Psychotherapy.* This course is offered only to advanced clinical graduate students who are engaged in psychotherapy. The course will consist of discussions of psychotherapeutic problems and theory in connection with case material.
Through the year. Th., 7-9 P.M. MR. WEINREB

338a. *Clinical Neurophysiology.* The study of neurophysiological functions as they pertain to human behavior. MR. VARJABEDIAN
Sat., 1-3.

339a. *History and Systems of Psychology.* The historical development of psychological methods, concepts and theories.
First semester. Th., 1-3. MR. GWINN

340b. *Physiological Psychology.* An investigation of the physiological mechanisms underlying psychological processes.
Half course. Second semester. Th., 1-3. MR. GWINN

345b. *Psychology of Economic Behavior.* MR. WEIR

349. *Clinical Research Methodology.* A survey of current research methods in clinical psychology.
First semester. By arrangement. VARIOUS MEMBERS OF
Second semester. By arrangement. THE STAFF

350. *Research in Psychology.* Individual direction of students in their research projects. STAFF OF THE DEPARTMENT

390. *Departmental Colloquium.*
Through the year. W., 7:45 P.M.
THE STAFF, GRADUATE STUDENTS
AND VISITING LECTURERS

FIELD WORK COURSES IN CLINICAL PSYCHOLOGY

(Hours to be arranged)

361. *Required in Conjunction with 301.* MR. LEVENTHAL

363. *Required in Conjunction with 303a.*
First semester. MR. BELL

NON-CREDIT WORKSHOPS

1. *Advanced Workshop in Psychological Statistics.*
Selected problems in small sample theory.
Through the year. To be arranged. VISITING LECTURERS

2. *Workshops in Clinical Methodology.* VISITING LECTURERS

3. *Workshop in Neuropsychology.* Problems concerning neurological correlates of behavior.
Second Semester. Sat., 1-5 P.M. MR. PRIBRAM

Department of Romance Languages

ASSOCIATE PROFESSOR REID, ASSOCIATE PROFESSOR NICOL, ASSOCIATE PROFESSOR KING, ASSISTANT PROFESSOR BARBERA

Courses offered in the languages and literatures of France, Spain, and Spanish America have been planned to provide:

1) an adequate foundation for graduate study or teaching either French or Spanish, or both;
2) a thorough reading knowledge of both languages, essential for carrying on advanced study in natural sciences, social sciences, and the humanities, and for fulfilling the language requirement for the degree of Bachelor of Arts;
3) a competent speaking knowledge of both languages.

A major in Romance languages must comprise:

1) four full courses to be chosen from the following:
    French 13, 114, 123a, 151a, 152a, 153b, 154b.
    Spanish 13, 114.
    Romance languages 124b.
2) French 113 or the equivalent.
3) General Education 14, or the equivalent, normally to be completed by the end of the sophomore year.
4) at least one course, to be approved by the department, in non-Romance literature.
5) a satisfactory record in the senior comprehensive examination.

Students majoring in Romance languages are expected to acquire a thorough knowledge of either French or Spanish and are urged to acquire a competent knowledge of the other, both in language and in literature.

If at least two units of elementary Latin or elementary Greek have not been accepted for admission to college, a Romance language major must satisfy the classics requirement as prescribed under the heading "Major" in the statement of requirements for the degree of Bachelor of Arts.

Students intending to major in Romance languages should consult Mr. Reid.

The department wishes to encourage any students who are interested in combining work in French or Spanish with work in another field to consult Mr. Reid regarding the possibilities for interdepartmental major programs.

A program leading to a degree "with honors in Romance languages" is available to qualified upperclassmen.

Courses in French

During the academic year 1955-556 the following courses in French were given: 11, 12, 13A, 14, 113, 114, 123a, 151a and 154b.

1. PRIMARILY FOR UNDERGRADUATES

11. *Elementary.* For beginners. The elements of grammar and pronunciation; carefully graded reading; exercises in speaking and writing simple French. Open to freshmen.

Indivisible course.

Through the year. M. W. F., 10 and Tu. Th., 9; F., 1 and Tu, Th., 10, M., 1. Mr. Reid, Mr. King and Mrs. Pagès

12. *Intermediate.* Review of grammar, exercises in composition and pronunciation, intensive and extensive reading in a variety of modern texts.

Prerequisite: French 11 or the equivalent, to be determined by a placement test. Open to freshmen.

Indivisible course.

Through the year. Tu. Th., 9; F., 1 and Tu. Th., 10; M., 1.
Mr. Nicol and Mr. King

13.* *Oral and Written French.* Third-year course. This course is conducted largely in French. Admission is subject to the approval of the instructor in each semester. The normal sequence is 13 A during the second semester of one year and 13 B during the following first semester. The two parts of the course are organized as follows:

A. Analytical study and practice of the elements of communication in French: basic conversational patterns; the sound, rhythm and tone patterns of French pronunciation; advanced review of grammar; exercises in written expression.

Prerequisite: Grade of B— or higher in French 12, or equivalent skill in the language, to be determined by a placement test. Open to freshmen. Mr. Reid

Offered in the second semester in alternate years. M. F., 2; laboratory W., 2-4.

To be omitted in 1956-57.

B. Advanced practice of communication in French. Composition, oral reports, classroom discussion. Not open to freshmen.

M. F., 9; Laboratory W., 1-3. MR. NICOL

Offered in the first semester in alternate years.

Omitted in 1955-56.

14.* *Readings in French Literature.* Third-year course. Then emphasis in the first semester is on reading as communication, with analysis and practice of the techniques of effective reading in French. The emphasis in the second semester is on an understanding of a number of French works of universal importance and appeal.

Prerequisite: French 12 or the equivalent, to be determined by a placement test. Open to freshmen.

Through the year. M. W. F., 9 and 10. MR. REID, *first semester*
MR. NICOL, *second semester*

113. *Introduction to French Civilization.* A selective survey of the history, art, literature and music of France, from the Middle Ages to the present time. An elementary reading knowledge of French is desirable but not required. Admission is subject to the approval of the instructor.

French 113 may be counted in fulfillment of the general requirement in art, music and literature, but not toward fulfillment of the requirement in foreign language. Some meetings are held in the Worcester Art Museum.

Through the year. In alternate years. To be omitted in 1956-57.
MR. NICOL

114. *General View of French Literature.* An interpretation of the main currents of French literature. Each period is studied by concentrating attention on a limited number of works and authors best bringing to focus the characteristics of the period.

Prerequisite: Grade of B— or higher in French 13 or 14 or the equivalent.

Through the year. M. W. F., 9. MR. KING

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*Courses 13 and 14, described above, are "third-year" language courses within the meaning of the foreign language requirement for the degree of Bachelor of Arts. Course 14 is offered to meet the needs of the general student; course 13 is designed primarily for the student with particular interest and aptitude for language study, who intends to take subsequent courses in literature. Both may be taken for credit.

123a. *Advanced Language.* Advanced composition and special study of grammatical topics.

Prerequisite: Grade of B— or higher in French 13B.

Half course. First semester. Mr. Nicol

To be omitted in 1956-57.

Romance Languages 124b. Comparative French and Spanish Phonetics. The elements of general phonetics. A detailed study of the pronunciation of French and Spanish. A required course for majors who wish to be recommended for teaching either language.

Prerequisite: Grade of B— or higher in French 13A or Spanish 13; elementary knowledge of the other language.

Half course. Second semester. Mr. Reid

Offered in alternate years. Omitted 1955-56.

151a.* *The Middle Ages and the Renaissance.* Conducted in French.

Prerequisite: Grade of B— or higher in French 114, or the equivalent.

Half course. First semester. T. Th., 10-11:15. Mr. King

Offered in alternate years. To be omitted in 1956-57.

152a.* *Classicism.* A study of outstanding literary works, drawn principally but not exclusively from the age of Louis XIV, to illustrate the esthetic and intellectual nature of the classical point of view as it persists in the French thought of various periods. Conducted in French.

Prerequisite: Grade of B— or higher in French 114, or the equivalent.

Half course. First semester. Mr. Nicol

Offered in alternate years. Omitted in 1955-56.

153b.* *Romanticism and Realism.* A study of outstanding literary works, drawn principally but not exclusively from the late 18th and the 19th Centuries, to illustrate the esthetic and intellectual climates and the literary techniques generally described as romantic or realistic. Conducted in French.

Prerequisite: Grade of B— or higher in French 114, or the equivalent.

Half course. Second semester. Mr. Nicol

Offered in alternate years. Omitted in 1955-56.

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*For French 151a, 152a, 153a, and 154b a certain historical and analytical perspective such as is provided by French 114 is presupposed. These courses are planned so that they need not be taken in any chronological order, but may be taken at the student's convenience. Attention is given to the social forces and movements underlying the attitudes whose literary manifestations are under study.

14
12

154b.* *The Modern Period.* Conducted in French.
Prerequisite: Grade of B— or higher in French 114, or the equivalent.
Half course. Second semester. T. Th., 10-11:15. MR. NICOL
Offered in alternate years. To be omitted in 1956-57.

Courses in Spanish

During the academic year 1955-56 the following course in Spanish were given: 11, 12, 14 and 114.

1. PRIMARILY FOR UNDERGRADUATES

11. *Elementary.* For beginners. The elements of grammar and pronunciation; carefully graded reading; exercises in speaking and writing. Open to freshmen.
Indivisible course.
Through the year. Tu. Th., 8; F., 2 and Tu. Th., 10; M., 1.
MR. BARBERA

12. *Intermediate.* Review of grammar, exercises in composition and pronunciation, intensive and extensive reading of texts dealing with Spain and Spanish America.
Prerequisite: Spanish 11, or the equivalent, to be determined by a placement test. Open to freshmen.
Indivisible course.
Through the year. M. W. F., 8. MR. BARBERA

13.* *Third-Year Oral and Written Spanish.* A rapid intensive review of grammar; the elements of phonetics; exercises in composition and pronunciation; conversational practice. Course 13 is conducted largely in Spanish.
Prerequisite: Grade of B— or higher in Spanish 12, or equivalent skill in the language, to be determined by a placement test. Admission is subject to the approval of the instructor. Open to freshmen.
Through the year. Offered in alternate years. Omitted in 1955-56.
MR. KING AND MR. BARBERA

14.* *Readings in Spanish and Spanish-American Literature.* Third-year course. The first semester is devoted to Spanish American, the second semester to Spanish works. The emphasis in the first semester is on reading as communication, with analysis and practice of the techniques of effective reading in Spanish. The emphasis in the second semester is on the understanding of a number of major works of the literature of Spain, having universal importance and appeal.

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*See footnote on page 159.

Prerequisite: Spanish 12, or the equivalent, to be determined by a placement test. Open to freshmen.

Through the year. T. Th., 10; M., 1. MR. REID

114. *The Literature of Spain.* A general view of Spanish literature with emphasis on the study of the origins and development of the novel and drama, culminating in the masterworks of the nineteenth century. Necessary attention is given to political and cultural background.

Prerequisite: Grade of B— or higher in Spanish 13 or 14 or the equivalent.

Through the year. T. Th., 9; T., 1. MR. BARBERA

Offered in alternate years. To be omitted in 1956-57.

Romance Languages 124b. Comparative French and Spanish Phonetics. The elements of general phonetics. A detailed study of the pronunciation of French and Spanish. A required course for majors who wish to be recommended for teaching either language.

Prerequisite: Grade of B— or higher in French 13A, or Spanish 13; elementary knowledge of the other language.

Half course. Second semester. MR. REID

Offered in alternate years. Omitted in 1955-56.

Russian

These courses are offered to enable students to acquire a working knowledge of the language.

Russian 11. Elementary Russian. Basic grammar and vocabulary.

Through the year. M. W. F., 11. MRS. BRAHM

Russian 12. Intermediate Russian. Advanced grammar. Reading and conversation.

Through the year. M. W. F., 11. MR. RAEFF

Russian 13. Advanced Russian. Intensive reading of contemporary and literary sources.

Through the year. M. W. F., 12. MR. RAEFF

Sociology

A description of the offerings in Sociology will be found in the announcement of the Department of Economics and Sociology.

Spanish

A description of the offerings in Spanish will be found in the announcement of the Department of Romance Languages.

The Summer School — 1956

Intersession June 11 to June 30
Summer Session July 2 to August 17

DR. RUDOLPH F. NUNNEMACHER, Director

The Summer School of Clark University is an educational experiment combining and emphasizing the unique features of this university. Intimate, informal, and intensive instruction by university professors and distinguished visitors provide the summer student with an unusual opportunity to advance his education at either the undergraduate or graduate level.

In the fields of liberal arts, education, and business administration introductory as well as special advanced courses are scheduled. However, the student in addition to his courses, is encouraged to broaden his intellectual horizons by participating in the informal afternoon discussions, special evening lectures, conferences, or week-end excursions to famous New England cultural centers. Social events are intended to give a pleasing balance to the program.

Registration. The final day for registration for the Intersession is June 11, the date on which classes begin. Summer School registration will be on July 2 with classes beginning on the following day. Registration in advance, in person or by mail, is requested.

The Summer School catalogue or additional information may be obtained from the Director, The Summer School, Clark University, Worcester, Mass.

Tuition— For students not previously enrolled at Clark University the matriculation fee is $5. Tuition is $60 per course. The activities fee is $3. All tuition and fees are due and payble on or before the day classes begin.

Housing. Living quarters are available in the university dormitories for $5 a week, payable in advance.

Course Credit. All single courses are semester courses giving 3 hours credit. Those beginning with the number "1" are for undergraduates only, while those beginning with "2" are for advanced undergraduates or graduates. Students may carry one course in the Intersession and two day or evening classes in the summer session.

Courses Offered

BIOLOGY

S.19	Human Anatomy and Physiology	Shepro	10:30 and Labs.
GE-S.112	Man: His Heredity and Evolution	Shepro	11:45 A.M.
S.224	Neuroanatomy	Nunnemacher	Intersession
S.244	Biochemistry	Rosenkrantz	8:00 A.M.
S.370	Research in Biology	Staff	

BUSINESS ADMINISTRATION

*S.16	Business Statistics (double course)	Hargest	9:15 to 11:40 A.M.
S.17	Public Speaking (two classes)	Letendre, Beard	8:00 A.M. or 8:00 P.M.
S.109	Sales Management	Gladfelter	6:00 P.M., M., W., F.
S.124	Marketing Problems	Gladfelter	8:00 P.M., M., W., F.
S.132	Human Relations in Industry	Schwieger	Intersession

CHEMISTRY

*S.13	Organic Chemistry		8:00-10:25 A.M. and Labs.

ECONOMICS

S.11a	Principles of Economics (part I)	Melder	Intersession
S.11b	Principles of Economics (part II)	Van Tassel	9:15 A.M.
S.15	Public Finance	Maxwell	Intersession
S.21	National Income Analysis	Van Tassel	10:30 A.M.
S.28	Research in Economic Problems	Staff	

EDUCATION

S.20	Geography in Education	Warman	8:00 A.M.
S.112	Music in Education	Norwood	11:45 A.M.
S.217	The Use of Community Resources in Teaching	Borger	11:45 A.M.
**S.201	Child Growth and Development	Yulo	10:30-12:55 A.M.
**S.213	Guidance Services	Christensen	10:30 A.M.
**S.223	Demonstration—Elementary School Teaching	Shepherd	9:15-11:40 A.M.
***S.204	Child Development and Curriculum	Shepherd	10:30-12:55 A.M.

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*Double Course, two classes daily through summer session.
**Double Course, two classes daily, first three weeks, July 2—July 24.
***Double Course, two classes daily, second three weeks, July 25—August 17.

***S.225	Demonstration—High School Teaching	Shepherd, Yulo	9:15-11:40 A.M.
***S.237	School Administration	Jones et al.	10:30-12:55 A.M.

ENGLISH

S.11a	Composition and Literature	Modder	Intersession
S.11b	Composition and Literature	Carter	9:15 A.M.
S.12	Public Speaking (two classes)	Letendre, Beard	8:00 A.M. or 8:00 P.M.
S.102	The Concept of Tragedy in Eng. and Am. Lit.	Anderson	Intersession
S.103	The Comic Spirit in Eng. and Am. Lit.	Carter	8:00 A.M.
S.106	Contemporary American Fiction	Beard	6:00 P.M., M., W., F.
S.107	Literature of the East	Modder	10:30 A.M.

FINE ARTS

S.112	Music in Education	Norwood	11:45 A.M.
S.122	Introduction to Symphonic Music	Hastings	Intersession
GE-S.144	Introduction to Western Civilization	Edwards	Travel Course
S.151	Sculpture and Painting of the High Renaissance	Carpenter	Intersession
S.171	Modern Art	Carpenter	6:00 P.M., M., W., F.

GEOGRAPHY

S.16	Economic Geography	Haskins	11:45 A.M.
S.20	Geography in Education	Warman	8:00 A.M.
S.191	Cartography (single or double course)	Burnham	1:30 and Labs.
S.201	Problem Areas of the World	VanValkenburg	9:15 A.M.
S.288	The Tropical World	Haskins	10:30 A.M.
S.300	Research in Geography	Staff	

HISTORY AND GOVERNMENT

S.15b	Introduction to American Government	Cushing	10:30 A.M.
S.26	Modern History of Latin America	Bernstein	10:30 A.M.
S.233	The West in American History	Borger	9:15 A.M.
S.142	World Affairs	Bernstein	6:00 P.M., M., W., F.
S.204	Modern European Intellectual History	Raeff	Intersession
S.231	American Colonial History	Merriam	8:00 A.M.
S.239	America in Perspective	Hybels	8:00 P.M., M., W., F.
S.291	France and North African Crisis	Pages	11:45 A.M.

LANGUAGE

*S.12	Intermediate French	Nicol & Reid	9:15 A.M. & 2:00 P.M.
*S.14	Readings in French Literature	Reid & Nicol	9:15 A.M. & 2:00 P.M.
*S.11	Beginning German	Arndt	9:15 A.M. & 2:00 P.M.
*S.12	Intermediate German	Roberts	9:15 A.M. & 2:00 P.M.
*S.11	Beginning Spanish	Agbay	9:15 A.M. & 2:00 P.M.
*S.12	Intermediate Spanish		9:15 A.M. & 2:00 P.M.
*S.14	Readings in Spanish Literature	Duran	9:15 A.M. & 2:00 P.M.

MATHEMATICS

S.11b	Trigonometry and Analytical Geometry	Stubbe	8:00 A.M.
S.15	Numerical Analysis	Stubbe	10:30 A.M.

PHILOSOPHY

S.101	The Philosophy of Science	Schlagel	Intersession
S.114	The Philosophy of Americanism	Beck	9:15 A.M.
S.121	Classical American Philosophers	Beck	8:00 A.M.

PSYCHOLOGY

S.172	Theories of Personality	Baker	Intersession
S.180	Culture and Personality	Misch	8:00 A.M.
S.188	Psych. of Individual Mass Communication	Kaplan	8:00 P.M., M., W., F.
S.203	Abnormal Personality	Feffer	11:45 A.M.
S.300	Research in Psychology	Staff	

SOCIOLOGY

S.11a	Understanding Our Society	Killian	10:30 A.M.
S.224	The Sociology of the City	Killian	11:45 A.M.
S.215	Class Structure in American Society	Chinoy	Intersession

The Evening College 1955-56

ROBERT M. HYDE, Director

THE EVENING COLLEGE, established in 1953 as an institution devoted to adult learning, has three primary functions. With the conviction that education in our modern society must be a lifelong process, it provides university education for adults of all ages who seek further knowledge and personal development through selected studies in the broad areas of the liberal arts. Further, in recognition of the rapidly developing and changing needs of business and the professions, it provides courses designed to help working men and women improve their occupational skills and to prepare for positions of increased responsibility.

Secondly, the Evening College provides an opportunity for adults to earn the bachelor's degree, exclusively by evening study, through programs planned to meet the unique educational needs of the mature person. Formal programs are available leading to the Bachelor of Science degree in either General Studies or Business Administration. In June, 1956 the Evening College will graduate its first class of degree candidates.

Finally, as a community service, the Evening College organizes frequent non-credit short courses, institutes and seminars tailored to the specific needs of various civic, professional and business groups. Information regarding such services should be addressed to the Director.

In general, admission to the Evening College is open to all interested adults seeking to further their education. High school graduation, though not required, is desirable. Continued attendance is contingent upon evidence of ability to profit from the instruction offered. Admission to candidacy for a degree will be granted only upon satisfactory completion of a minimum of 15 and a maximum of 30 semester hours credit.

Detailed information about the Evening College is contained in the special catalogue available from the Director, The Evening College, Clark University, Worcester, Mass. Catalogues are issued in advanced of registration for the Fall and Spring semesters.

Courses Offered — Fall Semester 1955

Number	*Course*	*Credit*	*Instructor*
MONDAY			
B.A. —E.9	Elementary Algebra	3	John Stubbe
B.A. —E.113	Work Simplification	3	Joseph Nordstrom
B.A. —E.129	Federal Tax Accounting	3	Robert J. Hurwitz
B.A. —E.170	Management of Small Business	3	Everett P. Webster
C.L. —E.115	Faust and the Search for Knowledge	3	Karl J. R. Arndt
EC. —E.13	Money and Banking	3	James A. Maxwell
EN. —E.12	Public Speaking	3	Robert S. Illingworth
EN. —E.120	Literature of Modern American Life	3	Edward H. Hastings
PSY. —E.111	General Psychology	3	Seymour Wapner
SOC. —E.12	Peoples of the World	3	Albert Morris
TUESDAY			
B.A. —E.18a, b	Business Organization and Finance	3	James M. Hund
B.A. —E.23	Salesmanship	3	Warren K. Heckman
EC. —E.111a, b	Principles of Economics	3	Roger C. Van Tassel
PHIL. —E.111	Great Philosophers of the Past	3	Richard H. Schlagel
PSY. —E.175	The Adolescent	2	Theodore Leventhal
SOC. —E.25	Social Institutions in American Life	3	Frederick W. Killian
SP. —E.12a	Intermediate Spanish	2	Miss Helen G. Agbay
SW. —E.11a, b	Beginning Swedish	2	Mrs. Vanja Boklund
	The Atomic World of Today. Non-credit		Percy M. Roope
WEDNESDAY			
B.A. —E.117a	Principles of Accounting	3	George E. Hargest
b		3	Charles L. Sanders
B.A. —E.127a, b	Intermediate Accounting	3	Robert J. Hurwitz
EN. —E.14	Great American Writers of the Nineteenth Century	3	Karl O. E. Anderson
EN. —E.111a, b	English Composition and Literature	3	Edward H. Hastings
HIST. —E.131	Political History of the U.S.	3	Robert F. Campbell
INS. —E.15	Principles of Life and Disability Insurance	2	Robert F. Green
NU. —203X	Nursing in the Social Order	2	Miss Martha R. Smith
CLU —Part C	Law, Trust and Taxes. Non-credit		To be announced
THURSDAY			
B.A. —E.10	Elements of Production	3	Rudolph A. Johnson
BIO. —E.10	Man and the Animal World	3	Rudolph Nunnemacher
B.A. —E.112	Introduction of Personnel Management	3	Samuel J. Lukens
EN. —E.21	Non-Fiction Writing	3	William E. Harris
F.A. —E.19	Masterpieces of World Art	2	Miss Charlotte B. Johnson
HIST. —E.14	The Growth of Western Civilization	3	Samuel Osgood

Number	*Course*	*Credit*	*Instructor*
THURSDAY *(continued)*			
MU. —E.19	The Development of the Symphony	3	Edward H. Hastings
NU. —400X	Ward Teaching	2	Miss Myrtle M. Ford
PSY. —E.200	Social Psychology	3	Richard S. Lazarus
SP. —E.11a, b	Beginning Spanish	2	Raymond E. Barbera
FRIDAY			
AR. —E.117a, b	History and Culture of Armenia	3	Armen Jerejian
SATURDAY			
AR. —E.1-2	Armenian Language	2	Armen Jerejian
AR. —E.3-4	Intermediate Armenian	2	Armen Jerejian

Courses Offered — Spring Semester 1956

MONDAY			
BIO. —E.19	Human Anatomy and Physiology (Lab)	4	Rudolph Nunnemacher
B.A. —E.10	Business Mathematics	3	John S. Stubbe
B.A. —E.29	Production Control	3	Everett P. Webster
B.A. —E.130	Advanced Federal Tax Accounting	3	Robert J. Hurwitz
C.L. —E.116	The German Contribution to World Literature	3	Karl J. R. Arndt
EC. —E.210	Consumer Economics	2	F. Eugene Melder
EN. —E.123	Modern Literature	3	Edward H. Hastings
PSY. —E.103	Normal Personality	3	Robert W. Baker
NU. —206X	Principles of Teaching	2	Alice R. Major
SOC. —E.26	Crime, Delinquency and Corrections	3	Albert Morris
	Advanced Creative Art Techniques. Non-credit		John H. Fulgoni
TUESDAY			
B.A. —E.18b	Business Organization and Finance	3	James M. Hund
B.A. —E.124	Principles of Marketing	3	To be announced
B.A.SOC. —E.186	Law, Policy and Industry	3	Frederick W. Killian
EC. —E.111b	Principles of Economics	3	Roger C. Van Tassel
EN. —E.12	Public Speaking	3	Robert S. Illingworth
F.A. —E.20	Great American Artists	2	Charlotte B. Johnson
PHIL. —E.112	Problems and Trends in Contemporary Philosophy	3	Richard H. Schlagel
PSY. —E.176	Emotional Problems of Children	2	Theodore Leventhal
SW. —E.11b	Beginning Swedish	2	Vanja Boklund
C.P.C.U. Part I	Insurance Principles and Practices. Non-credit		Robert H. Butler
	Adventures in Creative Art for Everyone. Non-credit		John H. Fulgoni

Number		*Course*	*Credit*	*Instructor*
WEDNESDAY				
B.A.	—E.117b	Principles of Accounting	3	George E. Hargest
B.A.	—E.127b	Intermediate Accounting	3	Robert J. Hurwitz
B.A.	—E.227	Auditing	3	Charles L. Sanders
EN.	—E.11b	English Composition and Literature—Section I	3	Edward H. Hastings
		—Section II	3	William H. Carter
INS.	—E.16	Principles of Casualty and Property Insurance	2	Robert F. Green
POL. SCI.	—E.132	Basic Issues in Modern American Government	3	George H. Merriam
PSY.	—E.111	General Psychology	3	Herbert Lipton
CLU	—Part C	Law, Trusts, and Taxes. Non-credit		Sumner Silver
THURSDAY				
BIO.	—E.19	Human Anatomy and Physiology (Lecture)	4	Rudolph Nunnemacher
B.A.	—E.25	Principles of Purchasing	3	Rudolph A. Johnson
B.A.	—E.172	Office Management	3	Samuel J. Lukens
EN.	—E.22	Fiction Writing	3	William E. Harris
HIST.	—E.15	Problems of the Modern World	3	Samuel M. Osgood
MU.	—E.126	The Music of Beethoven	3	Edward H. Hastings
NU.	—215X	Nursing in Rehabilitation I	2	Elizabeth C. Ernst
PHYS.	—E.10	Introduction to Physical Science	3	Percy M. Roope
PSY.	—E.190	Industrial Psychology	3	Bernard Kaplan
SP.	—E.11b	Beginning Spanish	2	Raymond E. Barbera

Register and Directories

Trustees

Administration

Academic Boards and Committees

Faculty

Special Graduate School Appointments

Students — 1955-56

Degrees — 1955

Board of Trustees

Final authority in all matters pertaining to the University is lodged in the Board of Trustees by charter granted by the General Court of the Commonwealth of Massachusetts.

Francis H. Dewey, Jr. (1934)	Worcester, Mass.
Robert H. Loomis (1936), President	Boston, Mass.
Frank L. Adams (1938)	Worcester, Mass.
Howard M. Booth (1939)	Worcester, Mass.
Samuel H. Dolbear (1940)	New York, N. Y.
Carl E. Wahlstrom (1942), Vice-President	Worcester, Mass.
Raymond T. Gifford (1947), Treasurer	Worcester, Mass.
John Jeppson (1948)	Worcester, Mass.
Harry C. Coley (1948)	Worcester, Mass.
Roland A. Erickson (1951)	Worcester, Mass.
Joseph C. Molder (1954), Secretary	Worcester, Mass.
Jacob Hiatt (1955)	Worcester, Mass.

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(Four Year Term)

Herbert F. Lange (1952)	Detroit, Mich.
Hugh L. Keenleyside (1953)	Larchmont, N. Y.
Maxwell B. Seder (1954)	Worcester, Mass.
Clifford O. Griffith (1955)	Worcester, Mass.

Administration

Office of the President

Howard B. Jefferson, President of the University
Robert P. Anderson, Assistant to the President
Irma M. Brown, Secretary to the President
Donald L. Evans, Director of the News Bureau

Office of the Colleges

H. Donaldson Jordan, Chairman of the College Board
Henry C. Borger, Jr., Dean of Men
M. Hazel Hughes, Dean of Women
Eugene J. Kelley, Director of the Division of Business Administration.

George H. Merriam, Director of Admissions
James M. Coffee, Director of Placement and Vocational Counselor
Gladys Diliberto, Secretary to the Dean of Men and to the Chairman of the College Board

Office of the Graduate School
Dwight E. Lee, Secretary of the Graduate Board and Secretary of the Committee on Credentials
Samuel Van Valkenburg, Chairman of the Committee on Credentials

Office of the Evening College
Robert M. Hyde, Director

Office of the Treasurer
Raymond T. Gifford, Treasurer 18 Chestnut St., Worcester, Mass.
Patrick V. Sheehan, Assistant Treasurer
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Alice M. Currie, Assistant Bursar
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Office of the Librarian
Tilton M. Barron, Librarian
Marion Henderson, Reference Librarian

Office of the Registrar
Lydia P. Colby, Registrar

Office of the Medical Director
Michael B. Fox, M.D., Medical Director
Milton H. Yuddell, M.D., Medical Director
Anna C. McAtee, R.N., Nurse in charge of Infirmary

Office of Physical Education
Rocheleau Z. Granger, Jr., Director of Physical Education for Men
M. Hazel Hughes, Director of Physical Education for Women
Festus G. Amsden, Assistant Director of Physical Education for Men

Office of the Alumni Association
Henry L. Signor, Alumni Secretary

Academic Boards and Committees

THE UNIVERSITY FACULTY

The Faculty consists of the President, the Librarian, and all members of the staff giving regular courses of instruction. It has immediate supervision over the general education work of the university and is responsible for the nomination to the Board of Trustees of candidates for baccalaureate degrees and for honorary degrees.

Secretary of the Faculty, Sherman S. Hayden.

THE UNIVERSITY SENATE

The Senate consists of the President as chairman, and not less than six members of the Faculty appointed by the President. Its duties are to "advise the President with regard to questions of general policy and such other matters as may be laid before it by the President." It may bring appropriate matters to the attention of the Faculty, the Graduate Board and the College Board. It may recommend to the Faculty candidates for honorary degrees.

President Howard B. Jefferson, *Chairman*

Karl O. E. Anderson
Jesse L. Bullock
Charles T. Bumer
Robert S. Illingworth
Vernon Jones
H. Donaldson Jordan
Dwight E. Lee
James A. Maxwell
David Potter
Percy M. Roope
Samuel Van Valkenburg
Heinz Werner

THE GRADUATE BOARD

The Graduate Board consists of the President and representatives of the departments offering advanced graduate instruction. It has general control of the work of the Graduate Division and is responsible for the nomination to the Board of Trustees of candidates for the degree of Master of Arts and of Doctor of Philosophy.

President Howard B. Jefferson, *ex officio*

John E Bell
Jesse L. Bullock
Charles T. Bumer
Sherman S. Hayden
Vernon Jones
H. Donaldson Jordan
Gerson Kegeles
Arthur E. Martell
James A. Maxwell
F. Eugene Melder
Raymond E. Murphy
David Potter
Percy M. Roope
Samuel Van Valkenburg
Seymour Wapner
Heinz Werner

Dwight E. Lee, *Secretary*

THE COLLEGE BOARD

The College Board consists of the President, the Dean of Men, the Dean of Women, the Chairman of the College Board, and six members of the Faculty, appointed by the President. It has immediate supervision over the work of the Undergraduate Division, subject to the control of the Faculty, and recommends to the Faculty candidates for the Bachelor of Arts and Bachelor of Business Administration degrees.

President Howard B. Jefferson, *ex officio*
Dean Henry C. Borger, Jr., *ex officio*
Dean M. Hazel Hughes, *ex officio*

H. Donaldson Jordan, *Chairman*

Karl O. E. Anderson
Roy C. Gunter, Jr.
Gerson Kegeles
J. Fannin King
Joseph A. Nordstrom

Eugene J. Kelley, *Secretary*

THE EVENING COLLEGE BOARD

The Evening College Board consists of the President, the Director of the Evening College, and six members of the Faculty, appointed by the President. It has immediate supervision, subject to the control of the Faculty, over the Evening College, and recommends to the Faculty candidates for the Bachelor of Science degrees.

President Howard B. Jefferson, *ex officio*
Robert M. Hyde, Director, *ex officio*

Robert F. Campbell
H. Donaldson Jordan
Eugene J. Kelley
Joseph A. Nordstrom
Percy M. Roope
Seymour Wapner

THE ACADEMIC COUNCIL

The Council, established by vote of the faculty, is appointed by the President of the University subject to regulations providing for the distribution of its membership among the various divisions and departments.

Its duties are to make recommendations regarding undergraduate educational policies to check on the program of courses offered to undergraduates and to supervise honors work, senior surveys, and comprehensive examinations.

President Howard B. Jefferson, *ex officio*
H. Donaldson Jordan, *ex officio*
James A. Maxwell, *Chairman*
Raymond E. Barbera, *Secretary*

Charles T. Bumer
William H. Carter
James S. Edwards
Gordon T. Gwinn
Sherman S. Hayden
Gerson Kegeles

David Potter

ADMINISTRATIVE COMMITTEE FOR THE DIVISION OF BUSINESS ADMINISTRATION

President Howard B. Jefferson, *ex officio*
Eugene J. Kelley, *Chairman*

John E. Bell
H. Donaldson Jordan
James A. Maxwell
Raymond E. Murphy

Joseph A. Nordstrom

THE COMMITTEE ON PERSONNEL AND ORGANIZATION

Elected to advise the President regarding the personnel and the organization of departments.

H. Donaldson Jordan, *ex officio*

Charles T. Bumer
Dwight E. Lee
James A. Maxwell
Rudolph F. Nunnemacher
David Potter
Percy M. Roope

THE LIBRARY COMMITTEE

Karl J. Arndt, *Chairman*

Claude W. Barlow
Roy C. Gunter, Jr.

ATWOOD HALL COMMITTEE

Robert P. Anderson, *Chairman*

Donald H. Letendre
James S. Edwards

THE STUDENT ACTIVITIES FUND COMMITTEE

Percy M. Roope, *Chairman*

Guy H. Burnham
George E. Hargest, *Treasurer*

Standing Committees of the Graduate Board

The President of the University is, *ex officio,* a member of all committees of the Graduate Board.

THE COMMITTEE ON CREDENTIALS

The committee passes upon applications for admission to the graduate division and makes recommendations to the Graduate Board in respect to fellowships and scholarships and candidacy for graduate degrees.

Samuel Van Valkenburg, *Chairman*

Jesse L. Bullock
Vernon Jones
James A. Maxwell
Heinz Werner

Dwight E. Lee, *Secretary*

THE COMMITTEE ON PROFICIENCY IN FOREIGN LANGUAGES

The committee examines candidates for the degree of Doctor of Philosophy for proficiency in foreign languages.

Karl J. Arndt, Professor of German
J. Richard Reid, Associate Professor of Romance Languages
A representative of the student's major department

Standing Committees of the College Board

The President of the University and the Chairman of the College Board are, *ex officio,* members of all committees of the College Board.

THE COMMITTEE ON ADMISSIONS

Henry C. Borger, Jr.
Sherman S. Hayden
M. Hazel Hughes
George H. Merriam
David Potter
Percy M. Roope

THE COMMITTEE ON ATHLETICS

David Potter, *Chairman*

M. Hazel Hughes
James A. Maxwell
Rocheleau Z. Granger, Jr.
Henry J. Warman

COMMITTEE ON SCHOLARSHIPS

Charles T. Bumer, *Chairman*

David Potter
Roger C. Van Tassel

Faculty

Listed in order of academic seniority within each rank

HOWARD BONAR JEFFERSON, PH.D., LL.D., L.H.D. 160 Woodland St.
President and Professor of Philosophy since 1946.
A.B., Denison University, 1923; Ph.D., Yale University, 1929; LL.D., Denison University, 1948, Hillsdale College, 1952; L.H.D., Colgate University, 1951.

EMERITI

HOMER PAYSON LITTLE, PH.D., LL.D. 36 Whitman Rd.
Dean of the College and Professor of Geology, Emeritus.
A.B., Williams College, 1906; Ph.D., Johns Hopkins University, 1910.

BENJAMIN SHORES MERIGOLD, PH.D., SC.D. 21 Maywood St.
Professor of Chemistry, Emeritus.

*HAVEN DARLING BRACKETT, PH.D.
Professor of Greek and Latin, Emeritus.

LEROY ALLSTON AMES, M.A. Spencer, Mass.
Professor of English Literature, Emeritus.

CAREY EYSTER MELVILLE, A.B. 33 Vincent Ave.
Professor of Mathematics, Emeritus.

LORING HOLMES DODD, PH.D., L.H.D. 88 Sagamore Rd.
Professor of English and Art, Emeritus.

SAMUEL J. BRANDENBURG, PH.D. 9 Willard Ave.
Professor of Economics and Sociology, Emeritus.

PROFESSORS

JESSE LUNT BULLOCK, PH.D. 35 Downing St.
Professor of Chemistry and Director of the Chemical Laboratories.
A.B., Harvard University, 1914; M.A., 1928; Ph.D., 1932. Assistant Professor, 1926-32; Associate Professor, 1932-37; Professor since 1937 (February).

JAMES ACKLEY MAXWELL, PH.D. 15 Sunnyhill Dr.
Professor of Economics.
A.B., Dalhousie University, 1921; M.A., Harvard University, 1923; Ph.D., 1927. Instructor, 1924-26; Assistant Professor, 1926-28; Associate Professor, 1928-37; Professor since 1937 (February).

SAMUEL VAN VALKENBURG, PH.D. 11 South Flagg St.
Professor of Geography. Director of the Graduate School of Geography.
Ph.D., University of Zürich, 1918. Special Lecturer in Geography, second semester, 1926-27; Assistant Professor, 1927-29; Associate Professor, 1932-37; Professor since 1937 (February).

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*Died, January 30, 1956.

ROBERT STANLEY ILLINGWORTH, M.A., ED.M. Pleasant St., Barre

Professor of Speech and Drama.

A.B., Clark University, 1917; M.A., Lafayette College, 1926; Ed.M., Harvard University, 1933; B.D., Andover Theological School, 1945. Associate Professor of English, 1931-38; Professor since 1938 (February). Director of the Summer School, 1935-41.

VERNON JONES, PH.D. 267 Salisbury St.

Professor of Educational Psychology.

A.B., and M.A., University of Virginia, 1920; M.A., Columbia University, 1924; Ph.D., 1926. Associate Professor, 1926-38; Professor since 1938 (February).

HENRY DONALDSON JORDAN, PH.D. 171 Woodland St.

Professor of English History and Chairman of the College Board.

A.B., Harvard University, 1918; M.A., 1922; Ph.D., 1925. Associate Professor, 1931-38; Professor since 1938 (February).

DWIGHT ERWIN LEE, PH.D. 3 Woodman Rd.

Professor of Modern European History and Secretary of the Graduate Board.

A.B., University of Rochester, 1921; M.A., 1922; Ph.D., Harvard University, 1928 (February). Assistant Professor, 1927-30; Associate Professor, 1930-38; Professor since 1938 (February).

DAVID POTTER, PH.D. 113 South St. Auburn, Mass.

Professor of Biology.

B.Sc., Massachusetts Agricultural College, 1916; M.Sc., 1923; Ph.D., Harvard University, 1932. Instructor, 1924-27; Assistant Professor, 1927-33; Associate Professor, 1933-38; Professor since 1938 (February).

PERCY MARTIN ROOPE, PH.D. 2 Lovell Drive

Professor of Physics.

A.B., Clark University, 1920; M.A., 1924; Ph.D., 1927. Instructor, 1921-27; Assistant Professor, 1927-31; Associate Professor, 1931-43; Professor since 1943.

RAYMOND EDWARD MURPHY, PH.D.
Westminster Rd., Princeton, Mass.

Professor of Economic Geography since 1946.

B.S., Missouri School of Mines and Metallurgy, 1923; M.S., University of Wisconsin, 1926; Ph.D., 1930.

HEINZ WERNER, PH.D. 10 Atwater St.

Professor of Psychology since 1947.

Ph.D., University of Vienna, 1915. G. Stanley Hall Professor of Genetic Psychology since 1949.

CHARLES THEODORE BUMER, PH.D. 121 Richmond Ave.

Professor of Mathematics since 1948.

B.Sc., Denison University, 1919; M.A., Harvard University, 1922; Ph.D., Ohio State University, 1931.

Karl J. Arndt, Ph.D. 5 Hazelwood Road
Professor of German since 1950.
M.A., Washington University, 1928; Ph.D., The Johns Hopkins University, 1933.

Richard Jewett Lougee, Ph.D. 24 Maywood St.
Professor of Geomorphology.
B.S., Dartmouth College, 1927; M.A., University of Michigan, 1929; Ph.D., Columbia University, 1938. Associate Professor, 1947-1950 (January); Professor since 1950.

Arthur Earl Martell, Ph.D. Maynard St., Northboro
Professor of Chemistry.
B.S., Worcester Polytechnic Institute, 1938; Ph.D., New York University, 1941. Assistant Professor, 1942-46; Associate Professor, 1946-51; Professor since 1951.

Rudolph Fink Nunnemacher, Ph.D. Putnam Hill Rd., Sutton, Mass.
Professor of Biology. Director of the Summer School.
B.S., Kenyon College, 1934; M.A., Harvard University, 1935; Ph.D., 1938. Assistant Professor, 1939-44; Associate Professor 1944-55; Professor since 1955.

Joseph Weinreb, M.D. 2 State St.
Professor (Affiliate) of Psychology since 1947.
A.B., Vanderbilt University, 1931; M.D., 1935.

Ralph I. Dorfman, Ph.D. 195 Spring St., Shrewsbury
Professor (Affiliate) of Chemistry, 1955-56.
Ph.D., University of Chicago, 1934.

ASSOCIATE PROFESSORS

John Elderkin Bell, Ed.D. Putnam Rd., Holden, Mass.
Associate Professor of Psychology since 1944.
A.B., University of British Columbia, 1933; M.A., Columbia University, 1941; Ed.D., 1942.

Frederick W. Killian, LL.B. 21 Richards St.
Associate Professor of Sociology since 1947.
LL.B., New York University, 1925; A.B., 1934.

George Edward Hargest, M.B.A. 209 Lovell St.
Associate Professor of Economics and Business Administration.
B.S., Temple University, 1933; M.Ed., 1937; M.B.A., Boston University, 1947. Assistant Professor, 1942-48; Associate Professor since 1948.

Theodore Nicol, Ph.D. 10 Circuit Ave.
Associate Professor of Romance Languages.
A.B., Clark University, 1926; M.A., Harvard University, 1928; Ph.D. 1933. Visiting Professor, 1946-48; Associate Professor since 1948.

J. RICHARD REID, PH.D. Stafford St., Rochdale, Mass.
Associate Professor of Romance Languages.
A.B., Swarthmore College, 1935; M.A., Harvard University, 1936; Ph.D., 1943. Assistant Professor, 1944-48; Associate Professor since 1948.

SEYMOUR WAPNER, PH.D. 26 Prouty Lane
Associate Professor of Psychology since 1948.
A.B., New York University, 1939; M.A., University of Michigan, 1940; Ph.D., 1943.

HENRY JOHN WARMAN, PH.D. 193 Lovell St.
Associate Professor of Geography.
B.S. in Ed., Bloomsburg, Pa., State Teacher's College, 1932; Ed.M., Temple University, 1938; Ph.D., Clark University, 1945. Assistant Professor, 1943-44; 1945-48; Associate Professor since 1948.

KARL OSCAR EMANUEL ANDERSON, PH.D.
5 Brentwood Dr., Holden, Mass.
Associate Professor of English.
A.B., Harvard University, 1927; M.A., 1928; Ph.D., 1942. Assistant Professor, 1945-49; Associate Professor since 1949.

ROY CHALMERS GUNTER, PH.D. Dodge, Mass.
Associate Professor of Physics.
B.S., Bowdoin College, 1938; M.A., Boston University, 1939; Ph.D., 1942. Instructor in Physics and Mathematics, 1941 (February) - 1943; Assistant Professor of Physics, 1943-49; Associate Professor since 1949.

SHERMAN STRONG HAYDEN, PH.D. 68 Moore Ave.
Associate Professor of International Relations.
A.B., Harvard University, 1930; LL.B., 1933; M.A., Columbia University, 1936; Ph.D., 1942. Assistant Professor, 1946-49; Associate Professor since 1949.

FREDERICK EUGENE MELDER, PH.D. 173 Woodland St.
Associate Professor of Economics.
B.B.A., University of Washington, 1926; M.A., 1931; Ph.D., University of Wisconsin, 1936. Assistant Professor, 1937-42; Associate Professor, 1942-46 and since 1950.

EDWARD COUNSELMAN HIGBEE, PH.D. 78 Highland St., Holden, Mass.
Associate Professor of Geography since 1950 (February).
A.B., University of Wisconsin, 1932; M.A., 1938; Ph.D., Johns Hopkins University, 1949.

ROBERT FRANCIS CAMPBELL, PH.D. 209 Lovell St.
Associate Professor of American History.
A.B., Yale University, 1939; M.A., Columbia University, 1940; Ph.D., 1947. Assistant Professor, 1946-50, Associate Professor since 1950.

GERSON KEGELES, PH.D. 52 Zenith Drive
Associate Professor of Chemistry since 1951.
B.S., Yale University, 1937; Ph.D., 1940.

Claude W. Barlow, Ph.D. 2 Oak St.
Associate Professor of Classics.
A.B., Amherst College, 1928; M.A., Indiana University, 1930; Ph.D., Yale University, 1935. Assistant Professor, 1947-52; Associate Professor since 1952.

Leslie Phillips, Ph.D. 66 Gulf St., Shrewsbury, Mass.
Associate Professor (Affiliate) in Clinical Psychology.
M.A., University of Chicago, 1944; Ph.D., 1949; Instructor (Affiliate) 1946-49 50; Assistant Professor (Affiliate) 1950; 1949-50 Associate Professor (Affiliate) since 1950.

Tamara Dembo, Ph.D. 20 Loudon St.
Associate Professor of Psychology since February, 1953.
Ph.D., University of Berlin, 1930.

Richard S. Lazarus, Ph.D. 15 Fairlawn Road
Associate Professor of Psychology since 1953.
A.B., College of the City of New York, 1942; M.S., University of Pittsburgh, 1948; Ph.D., 1948.

***Morris H. Cohen, Ph.D.** 989 Main St.
Associate Professor of Government.
A.B., University of Chicago, 1939; Ph.D., 1950. Assistant Professor, 1947-53; Associate Professor since 1953.

John Sunapee Stubbe, Ph.D. 101 South Flagg St.
Associate Professor of Mathematics.
B.S., University of New Hampshire, 1941; M.S., Brown University, 1942; Ph.D., University of Cincinnati, 1945; Assistant Professor, 1949-53; Associate Professor since 1953.

Tilton M. Barron, B.L.S. 120 Amherst St.
Librarian since 1954.
B.A., Colorado College, 1937; B.L.S., Columbia University School of Library Service, 1940.

Gordon T. Gwinn, Ph.D. 26 Charlotte St.
Associate Professor of Psychology.
A.B., University of Arizona, 1942; Ph.D., Yale University, 1948. Assistant Professor, 1949-54; Associate Professor since 1954.

J. Fannin King, M.A. 7 Hawthorne St.
Associate Professor of Romance Languages.
A.B., Pomona College, 1936; M.A., Harvard University, 1937. Assistant Professor, 1946-54; Associate Professor since 1954.

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*Absent on leave, 1955-56.

Henry C. Borger, Jr., Ph.D. 156 Woodland St.
Dean of Men since 1954. Associate Professor of Education.
A.B., Princeton University, 1933; M.A., Columbia University, 1938; Ph.D., 1954. Assistant Professor, 1950-54; Associate Professor since 1954.

William H. Carter, Jr., Ph.D. 18 Oread St.
Associate Professor of English.
A.B., Middlebury College, 1936; M.A., Harvard University, 1938; Ph.D., 1951. Instructor, 1949-51; Assistant Professor, 1951-55; Associate Professor since 1955.

James S. Edwards, M.A. 21 Richards St.
Associate Professor of German.
A.B., Brown University, 1936; M.A., 1938. Assistant Professor, 1947-55; Associate Professor since 1955.

Daniel Gorenstein, Ph.D. 71 Oldham Rd., West Newton, Mass.
Associate Professor of Mathematics.
A.B., Harvard University, 1943; Ph.D., 1950. Assistant Professor, 1951-55. Associate Professor since 1955.

Eugene J. Kelley, Ph.D. 16 Oread St.
Associate Professor of Economics and Business Administration; Director, Division of Business Administration.
B.S., University of Connecticut, 1944; M. Ed., Boston University, 1948; M.B.A., 1949; Ph.D., New York University, 1955. Assistant Professor, 1949-55; Associate Professor since 1955.

Edith Meyer-Taylor 52A Eliot St., Jamaica Plain, Mass.
Associate Professor (Affiliate) of Psychology.
Ph.D., University of Leipzig, 1933; Diplômes des Etudes Pédagogiques, University of Geneva, 1935.

ASSISTANT PROFESSORS

M. Hazel Hughes, M.Ed. 638 Pleasant St.
Dean of Women. Director of Physical Education for Women.
B.Ed., Clark University, 1944; M.Ed., Boston University, 1949. Associate Dean for Women, 1949-54; Dean since 1954.

Rocheleau Z. Granger, Jr., M.A. in Ed.
113 Paxton St., Leicester, Mass.
Director of Physical Education for Men since 1949.
A.B., Clark University, 1938; M.A. in Ed., 1939.

Joseph A. Nordstrom, M.S. 18 Oread St.
Assistant Professor of Business Administration since 1950.
B.S., Northeastern University, 1941; M.S., Massachusetts Institute of Technology, 1947.

*ROBERT N. BECK, PH.D. 24 Mayflower Rd., Leicester, Mass.
Assistant Professor of Philosophy.
A.B., Clark University, 1947; M.A., Boston University, 1948; Ph.D., 1950. Instructor, 1948-52; Assistant Professor since 1952.

DONALD HENRY LETENDRE, M.A. in ED. 17 Oberlin St.
Assistant Professor of English.
A.B., Clark University, 1938; M.A., in Ed., 1939. Instructor, 1946-52; Assistant Professor since 1952.

MARC RAEFF, PH.D. 989 Main St.
Assistant Professor of Russian History and Language.
M.A., Harvard University, 1947; Ph.D., 1950. Instructor, 1949-52; Assistant Professor since 1952.

THOMAS TAMOTSU SUGIHARA, PH.D.
3 Longview St., West Boylston, Mass.
Assistant Professor of Chemistry since 1953.
A.B., Kalamazoo College, 1945; S.M., University of Chicago, 1951; Ph.D., 1952.

JAMES M. HUND, PH.D. Goodale St., West Boylston
Assistant Professor of Economics since 1954.
A.B., Amherst College, 1943; M.A., Princeton University, 1952; Ph.D., 1954.

ROGER C. VAN TASSEL, M.A. 31 Huntington Avenue
Assistant Professor of Economics since 1954.
A.B., Union College, 1947; M.A., Cornell University, 1950.

I. ALDEN MACCHI, PH.D. 54 Wachusett Street
Assistant Professor of Physiology since 1954.
A.B., Clark University, 1947; M.A., 1950; Ph.D., Boston University, 1954.

ROBERT W. BAKER, PH.D. 28 Walnut Hill Drive
Assistant Professor of Psychology, 1955-56.
A.B., Hobart College, 1947; Ph.D., Clark University, 1953.

JAMES M. COFFEE, M.A. 97 Vassar Street
Assistant Professor of Education since 1954, and Director of Placement.
A.B., Duke University, 1949; M.A., Cornell University, 1950.

*SAMUEL PENDLETON COWARDIN, III Southborough, Mass.
Assistant Professor of Fine Arts.
A.B., Harvard University, 1943; M.A., 1948.
Instructor, 1949-55; Assistant Professor since 1955.

RAYMOND E. BARBERA, DOCTOR EN LETRAS 23 Shirley St.
Assistant Professor of Romance Languages.
A.B., Brooklyn College, 1947; M.A., University of Arizona, 1948; Doctor en Letras, Universidad Nacional de Mexico, 1949. Instructor, 1953-55; Assistant Professor since 1955.

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*Absent on leave, 1955-56.

James Franklin Beard, Jr., Ph.D. 37 Stone St., Auburn, Mass.
Assistant Professor of English since 1955.
A.B., Columbia College, 1940; M.A., Columbia University, 1941; Ph.D., Princeton University, 1949.

Richard Bruce Carpenter, Ph.D. 4 Downing St.
Assistant Professor of Fine Arts, 1955-56.
A.B., Boston University, 1949; M.A., 1950; Ph.D., Harvard University, 1955.

Robert James Hybels, A.M. 7 Hampden St.
Assistant Professor of Education 1955-56.
A.B., Western Michigan College of Education, 1946; A.M., University of Chicago, 1948.

Theodore Leventhal, Ph.D. 827 Pleasant St.
Assistant Professor (Affiliate) of Psychology, 1955-56.
B.A., Brooklyn College, 1948; Ph.D., University of Kansas, 1953.

Stanley Chaberek, Jr., Ph.D. 16 West End Ave., Westboro
Assistant Professor (Affiliate) in Chemistry, 1955-56.
A.B., Clark University, 1947; M.A., 1948; Ph.D., 1949.

Bernard Kaplan, Ph.D. 25 Pocasset Ave.
Assistant Professor of Psychology, 1955-56.
A.B., Brooklyn College, 1948; M.A., Clark University, 1950; Ph.D., 1953.

INSTRUCTORS

Guy Harvey Burnham, M.A. 19 Woodman Rd.
Instructor in Geography since 1946. Cartographer, Graduate School of Geography since 1922.
A.B., Clark University, 1916; M.A., 1922.

Relly Raffman, M.A. 45 Boyd St., Cherry Valley
Instructor in Music since 1954.
B.A., Dartmouth College, 1943; M.A., Columbia University Teachers College, 1949.

* Clara Brahm, Ph.D. 426 Lovell St.
Instructor in Russian Language, 1955-56.
Ph.D., University of Heidelberg, 1926.

Richard Harold Schlagel 7 Hawthorne St.
Instructor in Philosophy, 1955-56.
B.S., Springfield College, 1949; M.A., Boston University, 1952; Ph.D., 1955.

Harold Webb, Jr. 4 Downing St.
Instructor in Government, 1955-56.
B.A., University of Pennsylvania, 1946; M.A., 1950.

* - Deceased 1-10-57

LECTURERS

Philip H. Breen, LL.B. 151 Barnard Rd.
Lecturer in Business Law since 1947 (January).
A.B., The College of the Holy Cross, 1920; LL.B., Boston University, 1923.

John Lane, Ph.D. 305 Belmont St.
Lecturer in Psychology, 1955-56.
B.S., University of Massachusetts, 1949; M.A., Clark University, 1951; Ph.D., 1954.

Anthony Varjabedian, M.D. 76 Elm St.
Lecturer in Psychology, second semester, 1955-56.
A.B., Clark University, 1941; M.D., Yale University, 1944.

M. Evelyn Harriman, M.A. in Ed. 39 Courtland St.
Lecturer in Education, first semester, 1955-56.
B.S. in Ed., Boston University, 1948; M.A. in Ed., 1950.

Dayton D. Shepherd, M.A. Durham, Conn.
Lecturer in Education, 1955-56.
B.S., Southwest Missouri State College, 1946; M.A., Yale University, 1950.

Edward H. Hastings, M.A. 8 Evandale Terrace, Dorchester, Mass.
Lecturer in English, 1955-56.
A.B., Wesleyan University, 1946; A.M., Harvard University, 1947.

Alastair Weir, Ph.D. 926 Main St.
Lecturer in Social Psychology, 1955-56.
M.A., University of Glasgow, 1946; Ph.D., Oxford University, 1951.

Karl Pribram, M.D. 200 Retreat Ave., Hartford, Conn.
Lecturer in Neuropsychology, second semester, 1955-56.
S.B., University of Chicago, 1939; M.D., 1941.

Erwin Raisz, Ph.D. Cambridge, Mass.
Visiting Lecturer in Geography, 1954-55.
Diploma, Royal Polytechnicum, Budapest, 1914; M.A., 1924; Ph.D., Columbia University, 1929.

Burton N. Gates, Ph.D. 24 Charlotte St.
Research Associate in Biology since 1954.
A.B., Clark University, 1905; A.M., 1906; Ph.D., 1909.

ASSISTANTS IN PHYSICAL EDUCATION

Festus G. Amsden 6 Downing St.
Assistant Director of Physical Education for Men since 1954.
A.B., Clark University, 1951.

Special Graduate School Appointments

TEACHING FELLOWS

PETER E. COMALLI, JR. A.B., Clark University, 1949; M.A., 1950.	Psychology
JAMES H. FINNERAN B.B.A., Clark University, 1955.	Economics and Sociology
JOHN P. GLENNON A.B., Boston College, 1953; A.M., 1954.	History
JAMES M. MILLER (2nd semester) A.B., Park College, 1952. A.M., University of South Dakota, 1953.	History, Government and International Relations
JAMES MONIZ A.B., Clark University, 1956.	Economics and Sociology
JOHN R. PAVIA, JR. (1st semester) A.B., Lehigh University, 1954. M.A., Clark University, 1955.	History, Government and International Relations
JAMES W. WIGHTMAN B.S., Franklin and Marshall College, 1954.	Economics and Sociology

APPOINTMENTS UNDER GRADUATE FUNDS

The Alumni Association Fund

JOHN F. EARL A.M., University of Western Ontario, 1952.	Economics and Sociology

The George S. Barton Fund

AMILCARE BIANCHERIA A.M., Clark University, 1954.	Chemistry
NANCY ANN JOHNSON A.B., Clark University, 1955.	Education

The Joseph F. Donnelly Memorial Fund

PETER ALDIN M.A., College of the City of New York, 1955.	Psychology
SIMON BAKER M.S., University of Arizona, 1951.	Geography
NICHOLAS R. COWENHOVEN A.M., Columbia University, 1954.	Economics and Sociology

JOHN D. CUSHING
History, Government and International Relations
A.M., University of New Hampshire, 1950.

RICHARD J. HOVEY — Chemistry
M.S., College of the Holy Cross, 1954.

STANLEY M. KLAINER — Chemistry
A.B., Clark University, 1952.

EMANUEL MAIER — Geography
Ph.S., New York University, 1953.

The Austin S. Garver Fund

MARGERY BODANSKY — Psychology
A.B., Swarthmore College, 1954.

CHAO-FAN HSU — Economics and Sociology
B.A., St. John University in Shanghai, 1949.

GODWIN A. ODENIGWE
History, Government and International Relations
A.M., Clark University, 1954.

SYBIL SPEIER — Psychology
A.B., Swarthmore College, 1954.

The Charles H. Thurber Fund

HANS KASER — Geography
M.A., University of Bern, 1953.

NORMAN H. POLLOCK
History, Government and International Relations
A.B., Ursinus College, 1955.

Directory of Students, 1955-56

Names of students are grouped in four lists:

I (1) — graduate students, undergraduate students and special students in attendance during the regular academic year 1955-56;
I (2) — those who were in attendance less than one semester;
II — those who attended the 1955 Summer School.

Explanation of letters and symbols:

S — Scholar (graduate)
F — Fellow (graduate)
'56, '57, '58, '59 — undergraduates
g — students formally admitted to the graduate school
s — special students
B — biology
BA — business administration
Ch — chemistry
Ec — economics and sociology
Ed — education
En — English
FA — fine arts
Ger — German
G — geography
H — history, government, and international relations
M — mathematics
Ph — physics
Phil — philosophy
Ps — psychology
RL — romance languages
V — veteran (preceding classification)
* — student in residence during the first semester only
† — student in residence during the second semester only

State omitted—Massachusetts; town omitted—Worcester; street names refer to streets unless otherwise indicated.

I (1). GRADUATE STUDENTS, COLLEGE STUDENTS AND SPECIAL STUDENTS IN ATTENDANCE DURING THE REGULAR ACADEMIC YEAR

Name	*Classification*	*Home Address*	*Local Address*
Aaronson, Anthony Eli	59	*46 Dellwood Rd.*	Estabrook Hall
Abraham, William John	V 57		14 Acton
Adelson, Elaine Sima	59		54 Amherst
Aharonian, Donald John	Ec g		34 Dover
Ahlstrom, Alice Solveig	59		21 Duxbury Rd.
*Ahmadjian, Vernon	V B S	*Whitinsville*	
Akerlund, Jane Alice	59		16 Bourne
Alberg, Richard Frank	V G g	*Pawtucket, R. I.*	4 Englewood Ave.
Aldin, Peter	Ps F	*New York, N. Y.*	100 Woodland
Aldis, Thomas Lewis	V 59	*Carpentersville, Ill.*	Estabrook Hall
Allard, Mrs. Joan Engstrom	56	*Oceana, Va.*	63 Upsala
Allard, William Cheney	56		44 Volkmar Rd.
Allmon, Cecil Iris	56		217 May
Allstrom, June Margaret	56	*Auburn*	
Almasian, Anthony Harry	V 56		22 Lakeside Ave.
Almeida, Silverio Pedro	V 57		48 Belmont
Amnott, James Roy	59	*Danvers*	Oxford
Anderson, Richard Langdon	58	*Willsboro, N. Y.*	10 Crystal
*Andrews, Dale William	Ch S	*Kaukauna, Wis.*	32 Richards
†Andrews, Forrest	V Ed g	*Uxbridge*	
†Angelopoulos, Theodore Peter	s	*Philiates, Thesprotia, Greece*	848 Main
Anton, Thomas Julius	56		5 Mott
Argento, Barry James	Ed g		3 Homer
Aron, Arlene Lee	Ps g	*Providence, R. I.*	49 Brownell
Arons, Martin	57	*Berlin, Germany*	100 Woodland
Aronson, Richard Jay	59	*Brooklyn, N. Y.*	Estabrook Hall
*Ashley, Richard Earl	G g		17 Hollywood
Aslanian, Audrey Mary	59		249 Chandler
Atkinson, Philip Weston	V 56	*Fitchburg*	
Aulson, William Neil	V 57	*Lynn*	
Babbidge, Theresa Gertrude	Ed g		54 Hollywood
Bailey, Bryan Albert	59	*Gardiner, Me.*	Estabrook Hall
Bailey, Elaine Gertrude	56	*Lyndon, Vt.*	1 Brittan Ct.
Baker, Donald Franklin	V 59		30 Lavallee Ter.
Baker, Joyce Ann	56	*S. Yarmouth*	9 Aylesbury Rd.
†Baker, Mrs. Rosalie Kenner	s	*London, Eng.*	1 Englewood Ave.
Baker, Simon	V G F	*Revere*	1 Englewood Ave.
*Baker, William Henry	s	*Orford, N. H.*	Grafton
*Ballentine, Viola E.	Ed g	*Auburn*	
†Baraf, Joseph Elliot	58	*Great Neck, N. Y.*	32 Richards
Bardsley, Bruce Morgan	56	*Auburn*	
Barker, Rosalind Francine	58	*New York, N. Y.*	Sanford House
Barton, Neil Mark	58	*New York, N. Y.*	43 Woodland
Basiulis, Gediminas Mike	V 56		40 Fruit
Bassios, Anastasia	56		478 Burncoat
Bates, Harold Martin	56	*Dorchester*	
Bates, Richard Allen	59	*Shrewsbury*	
Bean, David Milton	V 56		Green's Trailer Park
Behrman, Joseph Stephen	58	*Great Neck, N. Y.*	62 West
Bennett, Edwin Howe	56	*Auburn*	
Benoit, Edward George	V G g		18 Woodford
Benuskavich, Daniel Joseph	V 56		86 Penn Ave.
Bergman, Anna Marie	59		116 Apricot

Name	*Classification*	*Home Address*	*Local Address*
Berman, Mrs. Davida Shulman	57		28-A King
Berman, Joseph Irvin	57	*Marlboro*	
Bernard, Joan Carol	58	*Shrewsbury*	
Berthiaume, Gerald Francis	V 58	*Auburn*	
Biancheria, Amilcare	Ch F		145 Woodland
*Bianchi, David Alden	56		25 Perkins
Bilodeau, Judith Ann	59	*Salem*	Fanning House
Blanchard, Peter	58	*Staten Island, N. Y.*	7 Kilby
Bliss, Monte Maurice	Ps g	*Van Hiseville, N. J.*	4 Hartshorn Ave.
Bliumfeldas, Vidmantas Konstantinas	58		57½ Harrison
Bloomgarden, Charles Irving	57	*Laurelton, N. Y.*	145 Woodland
Bobeck, Charles Frederick	V 58	*Clinton*	
Bodansky, Margery	Ps F	*New York, N. Y.*	38 Merrick
Bogage, Lewis Eugene	57		253 June
Bogigian, Robert Aram	57		8 Moen
Boliver, Lillian Blanche	59	*Shrewsbury*	
Bolotin, Michael Herbert	58	*Mattapan*	Path. Lab. Worcester State Hosp.
Bolten, Jerome Jerald	56	*New York, N. Y.*	40 Richards
Borrner, Carl Oscar, Jr.	V H g	*Springfield*	11 Hawthorne
*Bossman, Robert Stanley	V 56	*Fitchburg*	
Boswell, Yvonne Marie	59	*Arlington, Va.*	Sanford House
Bouffard, Norman Arthur	59		4 Prentice
Boyle, Mary Catherine	58		142 June
Braunstein, Victoria Joyce	58		17 Bancroft
Brennan, David Bernard	V 57	*Leominster*	
Breslauer, Barbara Ann	Ps g	*Milwaukee, Wis.*	49 Chatham
Bresnick, Edith	57	*Manchester, N. H.*	Fanning House
Brockelbank, Rebecca Nancy	G g	*Georgetown*	72 Woodland
Brockman, Michael David	58	*Brooklyn, N. Y.*	40 Richards
Brodsky, John	59	*Yonkers, N. Y.*	Estabrook Hall
Broverman, Donald Monroe	Ps g	*Pittsfield*	17 Great Brook Valley Ave.
Broverman, Mrs. Inge Komers	57		17 Great Brook Valley Ave.
Brown, Donald Frederick James	58	*Wollaston*	16 Marble
†Brown, Edward Vincent	V 59	*Caldwell, N. J.*	Estabrook Hall
Brown, Frederick Charles, Jr.	V 58		18 Saybrook Rd.
Brown, Walter Mahlon	58	*Southampton*	16 Marble
*Browne, Doris Anne	s	*New London, Conn.*	Fanning House
Brownlow, Robert Earl	V 56	*Danbury, Conn.*	326 Charles River Rd. Watertown
Bruce, Marshall Holland	57	*Hudson*	
Brust, Ronald William	56		2 Ethan Allen
Bryant, Barbara	57	*Grafton*	
Bryson, Carl Joseph	V 59	*New York, N. Y.*	Estabrook Hall
Bucholz, Michele Andrea	58	*New Rochelle, N. Y.*	Woodland House
Bujnevici, John Joseph	V 58	*Gilbertville*	
Bunker, Kenneth Gordon	56	*Mystic, Conn.*	145 Woodland
Burton, Frank Stevenson	56		87 June
Bury, Janet Reta	Ps S	*Faust, N. Y.*	1020 Main
Buscone, Louis Joseph, Jr.	59	*Milford*	Estabrook Hall
Bushman, Richard Little	59	*Southboro*	
Butler, Mary Catherine	Ec g		7 Creswell Rd.
Byron, Anne Elizabeth	58	*Templeton*	Blakeslee House
Callahan, Raymond George	57		1194 Main
Caloccia, Ernest Michael	58		18 Shamrock
Cameron, Bernard Joseph	V 58		118 Woodland

Name	*Classification*	*Home Address*	*Local Address*
Caplan, Elinor Beth	56	*New Haven, Conn.*	Woodland House
Carapetian, Jean Y.	57	*Baghdad, Iraq*	91 Summer
Carey, Robert Vincent	V Ed g	*Millbury*	
Cariglia, Joseph John	58		103 Heywood
Carlson, Arthur Wallace, Jr.	V 56		17 Chatham Village Rd.
Caron, Henri Lionel	V 58	*Fitchburg*	34 Gates
Caronna, Dominic Augustus	V Ec g		20 Melrose
Carr, Douglas Dillaber	58	*Warren*	
Carter, John Augustin	G F	*Chestnut Hill*	Oakdale
Carter, Mrs. Lorna Little	57		18 Oread
Cha, Chung Hwa	58	*Seoul, Korea*	Blakeslee House
Chakour, Mitchell Gabriel, Jr.	s		11 Margin
Chamberlain, Peter Baird	57	*Westminster, Vt.*	16 Marble
Chang, SeWon	58	*Chonan, Korea*	4 Hancock
Charlesworth, Donald William	57		2 Lauf
*Charpentier, Ulric Geoffroy	s		Assumption Prep. School
Chase, Carole Elaine	58	*S. Lancaster*	
Chase, Robert Irving	V 56	*Hanover, Me.*	127 Highland
Chavoor, Shirley Marie	56		17 Rob Roy Rd.
†Chin, Eugene Sheu Theung	G g		5 Fiske
Christie, John Chris	V 57	*Mt. View, N. J.*	Estabrook Hall
Christoffers, Harry John	Ch F	*Amherst*	1 Tallawanda Dr.
Christoph, Eugene Charles	V Ed g	*Erie, Pa.*	94 Pasadena Pkwy.
Christopher, Peter Robert	59		10 Clifton
†Ciani, Libro	V Ed g		5 Caprera Rd.
Clark, Carolyn Janet	Ed S		63 Barnard Rd.
Clark, Gilmore Norman	57	*Melrose*	16 Marble
Clarkson, Frank Edward	Ps S	*Concord*	127 Institute Rd.
Clarkson, Robert Ernest	59	*Delmar, N. Y.*	Estabrook Hall
*Clinedinst, Richard W. Parsons	56		37 William
Cocchiola, Ronald Charles	58	*Waterbury, Conn.*	16 Marble
Cohan, Mrs. Suzanne Hieken	57		75-6 Park Ave.
Cohen, Charlotte Roslyn	Ed g		49 Sagamore Rd.
Cohen, Frederick Clifford	56	*Marlborough*	
Cohen, Harris Irving	56	*Rochester, N. Y.*	989 Main
Cohen, Martin Bert	56	*New York, N. Y.*	7 Kilby
Cohn, Linda Frances	56	*Laurelton, N. Y.*	Woodland House
†Colby, Raymond William	V Ed g		43 Freeland
Collins, Mrs. Delores Felice	57		2 Kingsbury
Collins, George Miles	58	*Milton*	16 Marble
Companion, Richard Paul	56	*Auburn*	
Consolmagno, Robert Harold	Ed g		24 Vassar
Cook, Edward Werner	59	*E. Hartford, Conn.*	Estabrook Hall
Cooper, Gordon Hickman	Ed g	*Leicester*	
†Cooper, William George Jr.	V 57		73 Brigham Rd.
Cooperman, Edward Charles	57	*Brooklyn, N. Y.*	36 Richards
Cote, Jeannette Cecile	57	*Moosup, Conn.*	6 Chatham
Coupe, John Donald	Ec g		7 Freeland Ter.
*Couture, Robert Ronald	59	*Gardner*	Estabrook Hall
Cowenhoven, Nicholas Remsen	V Ec F	*Grafton*	
†Cox, John Henry	57	*Hardwick, Vt.*	11 Hawthorne
Craig, Marcia Laura	58	*Whitinsville*	
Crist, Robert Paul	Ed g	*Southbridge*	
Cronkite, Mrs. Sharon Lee	56	*Shrewsbury*	
Croog, Myra Leah	56	*New Haven, Conn.*	Fanning House
*Crooks, Maureen	58	*Ogdensburg, N. Y.*	81 Providence
Culbert, John Everett	57		10 Linden
Cundall, Patricia Anne	59		13 Kilby

Name	*Classification*	*Home Address*	*Local Address*
Curry, Patricia Joann	58	*Nantucket*	Fanning House
Cushing, John Daniel	H F		163 Constitution Ave.
Dahlstrom, Lee Durant	56		36 Nelson Pl.
Daigle, Nobert Alvin	V 56		13 Home
Dargie, Daniel, Jr.	56	*Franklin, N. H.*	145 Woodland
Daughney, Henry Augustus	V 56	*Fitchburg*	
Davis, Roberta Louise	B S		24 Walcott
Dawson, George Brammer	57	*Prospect Plains, N. J.*	35 Maywood
Dawson, Robert William	V 57	*Albany, N. Y.*	898 Main
DeBoer, Sidney Ernest	V 57	*Clinton*	
Dedes, Michael Stephen	V 57		4 Warden
Degrandpre, Charles Allyson	58	*Jaffrey, N. H.*	35 Maywood
Delia, Herbert Claude	V s	*Malden*	
del Olmo, Ginés	56	*Mérida, Venezuela*	576 Burncoat
Denardo, Richard Steven	V 59	*Waterbury, Conn.*	Estabrook Hall
DeNigris, Nicholas Emanuel	57	*New Britain, Conn.*	16 Marble
DeProspo, Ernest Rocco, Jr.	59		1 Somerville Rd.
D'Errico, Peter Michael	V 57		13 Northboro
Desjardins, Robert Alfred	V 57	*Lowell*	35 May
†Desmarais, Ronald Adelard	59	*Fisherville*	
Diamond, Deanna	59	*Manchester, N. H.*	Sanford House
DiGregorio, Carl John	59	*Milford*	Estabrook Hall
DiRenzo, Vincent Neil	V G g	*Shenandoah, Pa.*	Milford
DiStefano, Frank James	59		Shrewsbury
Dion, Francis Bruce	56	*Leominster*	
DiVerdi, John Richard	56		4 Plum
Djeu, Wendy	57	*Buenos Aires, Argentina*	Woodland House
Dmuchovsky, Basil	Ch s	*Brimfield*	
Dobin, Myra E.	59	*Far Rockaway, N. Y.*	Sanford House
Docekal, Joan Marie	59	*Fitchburg*	
Dodd, Roy James	V 56	*Southbridge*	
Dolley, Marilyn Louise	59	*N. Hollywood, Calif.*	Woodland House
Donabedian, Richard Kasper	58		324 June
Donoian, Haig Cadmus	Ch F	*Lowell*	40 Richards
Donovan, Stephen	59	*Falmouth*	Estabrook Hall
Dooley, Phyllis Ann	59		3 Laurel
Doran, Mary Agnes	V Ch g		356 Chandler
Downes, George Andrew, Jr.	Ed g		9 Wentworth
Drapos, Alexander Evangelos	58		76 June
Drevinsky, Peter Joseph	Ch F	*Middleboro*	34 Gates
Driscoll, Irene Mary	59	*S. Boston*	118 Woodland
Duerr, Richard Clarence	58	*Canton, Ohio*	2 Claremont Sq.
Duffy, Robert Walter	57	*Clinton*	
Dunford, Frederick Francis	V 59		8 Greybert Lane
*DuPont, Carole Joan	59		3 Newport
Dworman, Ellis David	57	*Cherry Valley*	
†Dwyer, John Joseph	Ed g		14 Sun Valley Dr.
Dyer, Joseph John	V 56		13 Home
Earl, John Frederick	Ec F	*London, Ontario, Can.*	433 Park Ave.
*Eaton, David Hugh	s	*N. Grafton*	
*Ede, Elwood Kossuth	59		119 Green
Elefterakis, Peter John	59	*Westfield*	
Ellefsen, Richard Arthur	V G S	*Sebastopol, Calif.*	Shrewsbury
Ellis, Richard Peter	59	*Belle Harbor, N. Y.*	Estabrook Hall
Ellison, Herbert Richard	56		54 W. Boylston Dr.
*Ellowis, Carla Lynne	58	*Rockville Center, N. Y.*	Sanford House

Name	*Classification*	*Home Address*	*Local Address*
Emens, Peter Farnham	58	*Belmont*	16 Gates
†Emond, Norman Richard	Ed g	*Putnam, Conn.*	
English, Paul Ward	57		16 Leon
Engstrom, Lincoln Loring	56	*Auburn*	
Erickson, Carl John	59	*Fitchburg*	Estabrook Hall
Erickson, Eleanor Sylvia	58	*Gardner*	Sanford House
Erikson, Erna Marie	V 57		42 Eagan Ave.
Eriksson, Sylvie June	57		139 Ararat
Erle, Richard Aaron	V Ps S	*New York, N. Y.*	875 Main
Escolas, Richard Allen	56	*Leicester*	
Faber, Bernard Lewis	59	*Franklin*	Estabrook Hall
Farrell, Anne Margaret	58	*Rumford, Me.*	Sterling
Farrow, Raymond Leonard	56		26 Haynes
Fedorczuk, Michael	V 57	*Manchaug*	
Feinstein, Rosaline Shirley	57	*Bridgeport, Conn.*	Blakeslee House
†Fingar, William Peter	V 58		13 Wyman
Finn, Norman Herbert	57		17 Arlington
Finneran, James Henry	V Ec S	*Westboro*	
Fischer, Martin Alan	58	*Brooklyn, N. Y.*	36 Richards
Fisher, Charmian Roxanne	59	*Wilkinsonville*	
Fitts, Richard Stanley	59	*E. Brookfield*	
Flodman, Ronald Everett	59	*Holden*	
Foley, Robert John	59	*Flushing, N. Y.*	Estabrook Hall
Forte, Wesley Elbert	56	*N. Brookfield*	
*Fortier, Olney	59	*Danielson, Conn.*	Estabrook Hall
†Forzley, Philip	V 58		287 Plantation
Foster, Elaine Elizabeth	57		394 Burncoat
Franklin, Jeanne	Ps g		85 Chatham
Fraser, John Keith	G F	*Ottawa, Ont. Can.*	148 Beacon
Freed, Lawrence	57		1 Manilla
Friedman, Stuart David	59		32 Bridgeport
Frieswick, Sidney Samuel, Jr.	59	*Sutton*	
Fuchs, Roland John	G F	*Yonkers, N. Y.*	898 Main
Fulgoni, John Henry	Ed g		60 Elm
†Gagne, Robert Pickering	V 57		8 Shepard
Galvin, Richard Francis	V 57		12 Irene
Gariepy, Roland Edmond	V 59	*Leominster*	
Garon, Diana	57	*Portland, Me.*	Blakeslee House
Gaucher, Adrian Armand, Jr.	57	*Southbridge*	16 Gates
Gauld, William John, Jr.	57	*Sterling*	35 Maywood
Gay, George Henry, Jr.	58	*Southboro*	
Gens, Stephen Herbert	57	*Brookline*	21 Shirley
Germain, Norman William	V 58		9 Marshall
Gerrol, Robert	57		3 Bellvista Rd.
Giannini, Frank Domenic	59	*Auburn*	
Gibbons, William Michael	57		57 Downing
Gillies, Robert Bruce	58		9 Charlton
Gilmartin, Thomas Francis	V Ed S		95 Gage
Girgis, Monir Saad	G F	*Cairo, Egypt*	16 Crystal
Gladding, Judith Mae	58	*Chester, Conn.*	Sanford House
Glanzman, Bertram	59	*Far Rockaway, N. Y.*	Estabrook Hall
Glennon, John Patrick	H F	*Mattapan*	
Glickman, Melvyn	59		209 May
Goggin, Andrienne Landry	58	*Claremont, N. H.*	Blakeslee House
Goldberg, Stephen Roger	57	*Revere*	20 Shirley
Goldstein, Alden	59		83 Longfellow Rd.
Gordon, Audrey Erna	58		596 Chandler

Name	*Classification*	*Home Address*	*Local Address*
Gordon, Bennett Samuel	58		81 Fairfax Rd.
Goretti, Sandro	V 59		3 Draper
Gorman, George Richard, Jr.	57	*West Upton*	
Goss, Richard Henry	56	*Massapequa, N. Y.*	Shrewsbury
*Goss, Robert William	H g	*Fitchburg*	
Gotschall, Mrs. Barbara Jane	Ed g	*Auburn*	
Gould, Loren Nelson	V G g		142 Woodland
Grandone, Roy Ferris	58	*W. Sutton*	
Grant, William Thomas, Jr.	58		16 Goulding
*Green, John Gates	57	*Shrewsbury*	
Green, Leonard Charles	58	*Newark, N. J.*	40 Richards
Green, Phyllis Helen	Ed g		1 Lancaster Ter.
Greenberg, Mel Louis	59		36 Zenith Dr.
Greene, Cynthia Audrey	59	*Spencer*	
Greene, Harry Alan	59	*New Haven, Conn.*	Estabrook Hall
Greenwood, Louis Hunter	56	*Millbury*	
Gremley, Richard Leonard	V 57		78 May
Griffin, John Michael	V 56	*Waltham*	
Grigas, William Anthony	V 56		43 Providence
†Guerin, Henry Joseph	V 57	*Webster*	
Gustafson, Richard Lyman	V Ch g		121 Bailey
Gustavson, Martin Arnold	58	*Yonkers, N. Y.*	11 Charlotte
Haas, Virginia Marie	57		21 Lorenz
Hacanis, Andrew Joseph	V 58		42 Lakeside Ave.
Hachey, Joseph Edward	58	*Leominster*	
Hackendorf, Martin Reinke	59	*Melrose*	Estabrook Hall
Haddad, Herbert Hoover	V 57		2 Dartmouth
Hadjoglou, Christina Mary	57	*Webster*	
Hagberg, Kenneth Norman	V 57		12 Wellington
†Haggar, Victor William	Ed g		3 Cutler
Hagglund, Richard Albert	58		71 Catherine
Hagopian, Miasnig	Ch g	*Providence, R. I.*	Shrewsbury
Hagstrom, Conrad Walfred	59	*Millbury*	
Hagstrom, Mrs. Mary Fallon	s		2 Freeland
Haims, Bruce Wallace	56	*New York, N. Y.*	40 Richards
Hallberg, Carol Ann	59		60 Tower
Ham, Robert Joseph	V 59		150 Beaver Brook Pkwy.
†Hamlin, Henry Bernard	s	*Brighton*	Baldwinville
Hammer, Judith Lynn	59	*Wellesley*	
Hansen, Richard Andrew	58	*Fitchburg*	100 Woodland
Hanson, Richard Allen	57	*Northboro*	
Harper, Roy Lees, Jr.	V 57		21 Woodward
†Harriman, Edward Robert	V 59	*Fitchburg*	
Harris, Nancy Ellen	59	*Baldwinville*	
Hart, Nathan Hoult	58	*W. Cornwall, Conn.*	48 Downing
Hartleb, Harvey Hartley	56	*Bath, Me.*	145 Woodland
Hartwell, June	56	*Leominster*	
Harvey, Edythe Marilyn	57	*Shrewsbury*	
Haskell, Elmer Roger	V 57		6 Hermitage Lane
Hatfield, Colby Ray, Jr.	59	*Leominster*	
Hauk, Sr. Mary Ursula	G F	*Altoona, Pa.*	9 Ripley
Haupt, Carolyn Edith	57	*New Haven, Conn.*	Fanning House
*Hayes, David Goodwin	57		6 Oliver
Heald, Gordon Thayer	s		1 Brookshire Rd.
Healey, Dorothy Jane	58		73 Downing
Heath, Richard True	58	*Haverhill*	11 Hawthorne
Hebert, Pauline Yvonne	59	*Fitchburg*	

Name	*Classification*	*Home Address*	*Local Address*
Heilig, Mendel Loeb	V H g	*Salisbury, Md.*	50 Freeland
Helgesen, Vesta Louise	59	*Sutton*	
Heller, Betty Gail	58	*Mt. Vernon, N. Y.*	Woodland House
Herman, Sidney	V Ec g	*Brighton*	
*Hersch, Charles	Ps g	*Brooklyn, N. Y.*	827 Pleasant
Higgins, Thomas Henry	V 59	*Cranston, R. I.*	81 Providence
*Hill, Lennard Allan	57	*Milford*	36 Richards
Hill, Norman Richard	57	*E. Hampton, Conn.*	16 Marble
Hoffner, Burton Paul	57	*Arverne, N. Y.*	989 Main
Holmes, Mrs. Barbara Ann Ware	56		989 Main
Horvath, Joseph Erving	59	*New Brunswick, N. J.*	Estabrook Hall
Hosmer, Dorothy Alida	57		33 Richards
Houghton, Charles Bennett	56	*Hudson*	
Hovey, Richard John	Ch F		114 Dana Ave.
Howard, Millard Allen	58	*Palermo, Me.*	100 Woodland
Hsu, Chao Fan	Ec S	*Taipei, Formosa*	20 Gates
Hubbard, Winifred Ray	56	*W. Boylston*	
Hurwitz, Neal Jay	56	*Putnam, Conn.*	35 Maywood
Hutchins, Sandra Ann	59	*Grafton*	
†Hutchinson, Robert Henry	V Ed g		29 Shaffner
Hutchinson, Wanda Joanna	59	*Sharon, Conn.*	Fanning House
Hutchinson, William Albert	V 57		8 Beckman
Hutton, Doris Anne	59	*Staten Island, N. Y.*	Sanford House
Hyler, Earl Stewart, Jr.	58	*Portland, Me.*	100 Woodland
Iacovone, Julio James	V 58		35 Providence
Intorre, Benjamin Joseph	V Ch S	*Brooklyn, N. Y.*	7 Ashland
Isaac, Donald Marvin	Ps F	*Bronx, N. Y.*	4 West
Isaacson, Stephen	56	*Brooklyn, N. Y.*	7 Kilby
Jackola, Ann Marie	56	*Oakdale*	
Jackson, Harold Christiernin	V 58		89 Eunice Ave.
Jackson, Kenneth Warner	59		54 Woodland
Jackson, Meredith Lee	58		54 Woodland
Jackson, Merrilee Ann	58	*Watertown, Conn.*	Fanning House
Jackson, Robert Elliot	59	*Maynard*	44 Brantwood Rd.
Jackson, Stephen	58	*Newtown, Conn.*	10 Crystal
Jagolinzer, Philip	58	*Pawtucket, R. I.*	6 Wyman
Jennings, Sandra Paula	56	*Stratford, Conn.*	Fanning House
†Jerome, Henry Francis	V Ed g		28 Circuit Ave.
Johanson, June Ingrid	57	*Wassaic, N. Y.*	Blakeslee House
Johnson, Carle Albert, Jr.	57	*Laconia, N. H.*	16 Marble
Johnson, Clarke Dana	V 58	*Athol*	34 Gates
Johnson, Donald Melvern	V 57		120 Purchase
*Johnson, Mrs. Eleanor Day	V H F	*Charlton*	
*Johnson, Mrs. Elizabeth Omholt	s		28 Roxbury
Johnson, Nancy Ann	Ed S		447 Grove
Johnson, Richard Skerry	V 57	*Jefferson*	
Johnson, Robert Arthur	V 57	*Sutton*	
Johnson, Shirley Ann	59	*Roslyn, N. Y.*	Fanning House
Jolie, Richard Norman	57	*Auburn*	
Jones, George Charles	V 56		55 Constitution
Jordan, Edward John, Jr.	Ps g	*Hamden, Conn.*	4 West
Josephs, Barry Steven	59	*New Haven, Conn.*	Estabrook Hall
Josephy, Leslie	59	*Flushing, N. Y.*	Estabrook Hall
Jowise, Janet Helen	56	*Long Island City, N. Y.*	Woodland House
Jungmann, Henry	V 56	*Rangeley, Me.*	59 Maywood
Kacandes, Pearl George	58	*Neptune, N. J.*	Blakeslee House
Kaden, Stanley Edward	Ps g	*Holden*	

Name	*Classification*	*Home Address*	*Local Address*
Kagan, Richard Alan	57	*Medford*	145 Woodland
Kajander, Vivian Sylvia	57	*Gardner*	Fanning House
Kakouriotis, Alexander John	Ec S	*Athens, Greece*	20 Gates
Kaloosdian, Knarig Pauline	59	*Watertown*	Fanning House
†Kane, Benson	B g		63 Brownell
Kane, Paul Wayne	59		173 Beacon
*Karagheusian, Carl	V 58		934 Main
Karagosian, John Haig	V 58	*Whitinsville*	
Käser, Hans	G F	*Affoltern, Switzerland*	78 May
Kasperson, Roger Eugene	59	*Northboro*	
Katori, John Nasto	V 57		61 Pleasant
Katz, Ruth Margaret	59	*Bridgeport, Conn.*	Blakeslee House
Kaufman, Arthur Arnold	57	*W. Newton*	919 Main
Kay, Marjorie Alice	56		46 Leeds
Kazarian, Michael	V 59		17 Bancroft
Keating, John Joseph	58	*Fitchburg*	6 Downing
Keith, Stephen George	59	*Monson*	Estabrook Hall
Kelley, Justin John	V Ed g		490 Grove
Kelly, John Joseph	V 56		31 Blossom
†Kemp James Malcolm	V Ed g	*Belchertown*	
Kent, Joyce Micaela	58	*Millbury*	29 Laconia Rd.
Khan, Mohammed Halim	G F	*Aligarh, India*	35 May
Kiakis, Helen	57		16 Healy Rd.
*Killoran, Joseph Patrick	V 58		194 Tacoma
Kim, Hak Hyun	58	*Seoul, Korea*	28 Hollywood
Kim, Ha Poong	58	*Seoul, Korea*	70 Maywood
Kinell, Edwin Ellis	57		2 Longmeadow Ave.
Kingsbury, Mrs. Virginia Hill	59		52 Romola Rd.
Klainer, Stanley Melvin	Ch F		24 Loudon
Klein, Benjamin Zalman	56		46 May
Klein, Mrs. Charlotte Zitowitz	57		46 May
Klein, Judith Libby	59		5 Montvale Rd.
Klem, Bernard Alan	57	*Framingham*	32 Ripley
Klinger, Lawrence Allan	58	*Bronx, N. Y.*	7 Kilby
Knight, William Walton, III	58		11 Monadnock Rd.
Korstvedt, Arne Jens	V Ps F	*Port Chester, N. Y.*	4 West
Kostreba, Anthony John	V 58	*Palmer*	
Kottis, Anna Angela	56	*Uxbridge*	Fanning House
Kronberg, George Herbert	V 57		6 Deering Dr.
Krus, Donald Max	V Ps F	*Haledon, N. J.*	56 Bowdoin
Kusik, Mairi Janette	57	*Richmond*	Sanford House
Laakso, William Bruce	57	*Gardner*	35 Maywood
LaBrie, Donald Richard	Ed g	*Auburn*	
†LaConte, Richard	59		37 Alvarado Ave.
Lacoste, Roger Gerard	Ch F		25 Hollywood
Lajeunesse, Roger Lucien	V 57	*Putnam, Conn.*	
Lamberto, Nunzio Anthony	V 57	*Clinton*	
Lambros, Frank Harry	V Ec g	*Dudley*	
Lander, Ernest Mayer	56	*Caribou, Me.*	36 Richards
Lander, Robert Harvey	56	*Caribou, Me.*	36 Richards
Langille, Carolyn Margaret	58		6 Lansing Ave.
Langley, Kay Frances	59	*Newport, Me.*	156 Woodland
Larson, Barbara Ann	59		32 Trowbridge Rd.
†Larson, John Joseph	58		50 Fruit
Latino, Anna Teresa	57		8 Channing
Lavigne, Paul Taylor	56		20 Sherbrook Ave.
Lawrence, Ira Stephen	56	*Brooklyn, N. Y.*	36 Richards

Name	*Classification*	*Home Address*	*Local Address*
Leary, Mary Margaret	Ed g		137 Paine
LeBeau, Raoul Joseph	57	*E. Brookfield*	
Lee, Arthur Brown, Jr.	57	*Brooklyn, N. Y.*	7 Kilby
Leone, Lawrence Dominic	V 56	*Newton*	
Les, Frederick Joseph	V 58	*Clinton*	
†Levey, Marilyn	58		40 Aetna
Levison, Bruce Edward	57	*Brookline*	31 May
Levo, Edith Miriam	G S	*Santurce, Puerto Rico*	2 Downing
Liedes, Liisa Annikki	58	*Fitchburg*	Sanford House
Lincoln, Ralph Patterson	56	*Barre*	36 Richards
Lindberg, Bruce Allan	V 58	*W. Boylston*	
Lindblom, Barbara Jane	56		51 N. Worcester Ave.
*Lindgren, Maurice Roger	V H g		26 Fruit
Lindgren, Richard Einar	59		24 Indian Hill Rd.
Lipkin, David Lawrence	57	*Brooklyn, N. Y.*	10 Charlotte
Litsky, Joan Ann	57	*Waterbury, Conn.*	Woodland House
Little, Dana Anton	V G F	*Brunswick, Me.*	31 Clifton
Lockhart, Richard Arnold	V G S	*Waltham*	10 S. Buffum
Lockhart, Robert Earl	59	*Fitchburg*	Estabrook Hall
Loewus, Ann Lee	59	*Washington, D. C.*	Woodland House
Logue, Donna Marie	57	*Marcellus, N. Y.*	Fanning House
Lombardi, Edward Joseph	58	*Methuen*	16 Gates
Long, Ruth Stoddard	56	*Monson*	Woodland House
Longo, Nicholas Augustus	56	*Putnam, Conn.*	35 Maywood
Look, Frank Milton	V 57		5 Crown
Lopez, Manuel Dennis	56	*Westfield*	6 Downing
†Lord, Edgar Dana	Ed g	*Holden*	
Loubier, Eugene Emile	V 57		99 West
Loughlin, John Leo	V 57	*Shrewsbury*	
Lubitski, Carl James	57	*Oakville, Conn.*	16 Marble
Luna, Telesforo Wisco, Jr.	G F	*Pasuquin, P. I.*	11 Charlotte
Lundstrom, Robert Edward	59	*Millbury*	
Lynch, Frances Elizabeth	57	*Marlboro*	Woodland House
Lyons, James Francis	V 59		12 Scott
MacConnell, Gary	56	*Granville, N. Y.*	36 Richards
*MacKinnon, Hugh Neil	V 58	*Southbridge*	
MacRae, Theodore Norman Ulmond	V 59		5 Ralph Ave.
Maddocks, Vida Marie	59	*W. Boylston*	
*Mader, James Walter, Jr.	V H g	*Wichita, Kan.*	40 Richards
Madigan, Francis Walter, Jr.	V s		39 June
Madnick, Ronal Cyril	59		11 Crown
Magiday, Kenneth	56	*Bronx, N. Y.*	40 Richards
Magoon, Albra Louise	59	*Manchester, N. H.*	Woodland House
*Maguire, Richard Charles	57	*Leicester*	
Mahoney, Francis Xavier	59		28 Clive
Maier, Emanuel	V G F		1003 Main
Maki, Roberta Elaine	58	*W. Sterling*	
Makler, Herman Abraham	V 57	*Belmar, N. J.*	20 Gates
Mammo, Mekbib	59	*Harar, Ethiopia*	145 Woodland
Manna, George Robert	V 56		18 Northboro
Marcus, Harold Golden	58		5 Havelock Rd.
Marcus, Marilyn	58	*Brooklyn, N. Y.*	Sanford House
Marks, Milton Stanton	V 58		2 Ureco Ter.
Markun, Geraldine	59	*Brookline*	Fanning House
†Markus, Mrs. Klaudia	G g		941 Main
Marsella, Robert Anthony	V Ed g		38 Ayrshire Rd.
†Marshall, Thomas Swank	V 59	*Averill Pk., N. Y.*	Estabrook Hall

Name	*Classification*	*Home Address*	*Local Address*
Mason, Mrs. Edith Julia	Ed g	*Princeton*	
Matchett, Robert William	s	*W. Springfield*	11 Boynton
Matthew, David Vandlan	56	*W. Berlin*	
Mattson, Barbara Ann	58		21 Esther
Matusaitis, Vida Regina	58		4 Vernon Ter.
Maxham, David Earl	57	*Worcester, Vt.*	16 Marble
Maxwell, Bruce Alber	V 56	*Berlin*	142 Woodland
Mayer, Joseph	V Ps g	*Brookline*	423 Chandler
Mayo, Mrs. Clara Weiss	Ps F	*Nashua, N. H.*	
Mays, Lois Ann	58		38 Elliott
McAuliffe, Gaynell Ruth	V 56	*Windsor, Conn.*	Woodland House
McBride, Oliver Sullivan	V 59		52 Queen
*McCann, Theresa Frances	Ed g	*Clinton*	
*McCormick, James Edgar	G g	*Menlo Pk., Calif.*	31 Clifton
McCrohan, Ronald Edward	59		147 Providence
McFarland, Joseph Henry	Ps S		127 Institute Rd.
*McGee, Donald John	V 59	*N. Grosvenordale, Conn.*	
McGurren, Jane Ann	58		2 Germain
McMurray, James Robert	Ed g	*Clinton*	
McQuaid, Robert Allen	56		10 Oliver
Meadows, David Lee	57		55 Catherine
Melder, Susan Jane	59		173 Woodland
Melville, Gwendolyn Irene	59	*N. Wilkesboro, N. C.*	33 Vincent Ave.
Melvin, Paul Alan	56		216 W. Mountain
Mendelsohn, Joseph Mayer	V Ch F	*Revere*	37 May
Mesfin, Wolde Mariam	G g	*Addis Ababa, Ethiopia*	10 Birch
Mess, Irwin Howard	57		150 May
Messing, Robert	59	*Brooklyn, N. Y.*	Estabrook Hall
Michelson, Elizabeth Marit	58	*Woodmere, N. Y.*	Fanning House
Micuta, Jurate Emily	57		159 Vernon
†Mielke, Janyce Anne	57	*Durham, Conn.*	Sanford House
Miller, Arnold	Ps g		205 St. Nicholas Ave.
†Miller, James Merle, Jr.	V H g	*Kansas City, Mo.*	34 Gates
Miller, Mary Ellen	59	*Cherry Valley*	
Miller, Stuart Robert	58	*Brooklyn, N. Y.*	10 Crystal
†Miller, Susan Peckham	s		36 Sever
Millington, Richard John	V 58		12 Duxbury Rd.
Mitchell, Barbara Ann	59		13 Cheever
Mitchell, Robert Arnold	59		13 Cheever
Mogil, Rena Toby	56	*Brooklyn, N. Y.*	Blakeslee House
Moniz, James	56, Ed g		27 Henshaw
Montgomery, Robert Eldredge	59	*Norwich, Conn.*	Estabrook Hall
†Mooshagian, Madieros	V Ed g		16 Bluff
Moossa, Walter Francis	58	*Holden*	
Moreau, Claudette Therese	58	*Pawtucket, R. I.*	Fanning House
Morgan, Mary Byrne	57		32 Hadwen Lane
Morin, Edward Marshall	57		48 Midland
Morin, Marilyn Natalie	56		32 Maplewood Rd.
Morin, Wilfred William, Jr.	58	*Millbury*	
Morrison, Donald Lyman	57	*W. Millbury*	
Morrow, Barbara Anne	58	*Monson*	Woodland House
*Mosczynski, Leon Henry	V Ed g	*E. Douglas*	
Mosher, Edward Francis	V 57	*Rockland, Me.*	16 Marble
Mulholland, Thomas Basil	V Ps g	*Fitchburg*	
Multer, Raymond Bertram	56	*Far Rockaway, N. Y.*	40 Richards
Murakami, Yukito	Ch S	*Tokyo, Japan*	6 Downing
Murphy, Michael James	Ec g		17 Ashton
Myska, Frank Burton	V 58	*Rutland*	

Name	*Classification*	*Home Address*	*Local Address*
Nakayama, Eisuke	Ec S	*Hyogo, Japan*	20 Gates
Namuj, Marcos Yacoub	59	*Jerusalem, Jordan*	Estabrook Hall
Napolitano, Joseph Ernest	V 57	*Long Island City, N. Y.*	11 Charlotte
Nathan, David	59	*Far Rockaway, N. Y.*	Estabrook Hall
Nathan, Joseph	56	*Far Rockaway, N. Y.*	36 Richards
Natoli, Salvatore John	V G S	*Reading, Pa.*	4 Hancock
†Naukkarinen, Irmeli Inez	s		32 Belmont
Naylor, William Henry, Jr.	V 58		14 Sun Valley Dr.
Nazemi, Soltan Said	56	*Teheran, Iran*	35 Maywood
Neal, Cynthia Warren	Ed g	*Leominster*	
Nelson, Joyce Marie	58		87 Fairfax Rd.
Newell, Alan Hobart	B g		16 Hackfeld Rd.
Nichols, John Francis, II	57		6 Gates
Nichols, Mrs. Yukiko Suzuki	57		6 Gates
Nicholson, Donald Thomas	V Ed g		27 Dorchester
Nickel, Herbert Joseph	Ps g	*Baltimore, Md.*	153 Chandler
Nieroda, Victoria Eugenia	59		62 Vernon
Nikitas, Theodore Michael	V 59	*Fitchburg*	
†Nilson, Mrs. Edith Klinglof	Ed g		201 Lincoln
Nilsson, Ludvig Walter	59	*N. Conway, N. H.*	Estabrook Hall
*Noel, Carrington Farrar	V s	*Sterling Junction*	
Norcross, Carol Evelyn	56	*Poughkeepsie, N. Y.*	Blakeslee House
Nordell, Per-Olof	G g	*Korsnäs, Sweden*	7 State
†Noumoff, Samuel Joseph	56	*Brooklyn, N. Y.*	433 Park Ave.
Nugent, Gerald Francis	V 58		37 Vineyard
Nutting, Barbara Ann	59	*Berlin*	
Odenigwe, Godwin Anibeze	H F	*Nigeria, W. Africa*	50 Woodland
Ohwaki, Sonoko	Ps F	*Sendai, Japan*	35 May
Oickle, George Bradford	57		26 Heroult Rd.
Olson, Donald Hillier	56		2 Chalmers Rd.
Olson, Marjorie Louise	57		85 Downing
Olund, Robert Nils	58	*Auburn*	
Oswell, David Dill	V 56		147 Olean
O'Toole, William Francis	58		73 Wyola Dr.
Pacek, Stanley Edward	V 59		1 Pitt
Pagenstecher, John Albrecht	V G S	*E. Douglas*	
Pagès, Jacques Paul	H g		11 Malden
Paik, San Ok	56	*Seoul, Korea*	Woodland House
*Painchaud, Paul Theodore	s	*Pittsfield*	25 Freeland
†Palaima, Alphonse Joseph	Ed g	*Shrewsbury*	
Palmer, Judith Ann	57		20 Brookman
Paltrineri, Paul, Jr.	56	*Wellesley Hills*	
Panagiotopoulos, Anne Demetrios	56	*Pyrgos, Elias, Greece*	87 Commodore Rd.
Pantos, Ernest John	59		84 Coolidge Rd.
Park, David Alexander	V 59	*Shrewsbury*	
Park, Won Taik	59	*Seoul, Korea*	Estabrook Hall
Parker, James David	59	*Southampton*	Estabrook Hall
Parmenter, Franklin David	57	*Orange*	17 Crystal
Patracone, Louis Dominic	V 56	*S. Barre*	
Pavia, John Richard, Jr.	H F		29 May
Pawlina, Frank Edwin	V 56	*Woonsocket, R. I.*	
Peirce, David Allen	V 57		2A Bellingham Rd.
Perry, Francis Xavier	V 58	*Rochdale*	
Peters, Donald	V 58		332 Coburn Ave.
Peterson, Lee Kent	58		5 Reeves
Petrides, Mrs. Victoria Manos	56		14 May

Name	*Classification*	*Home Address*	*Local Address*
Petridis, Adrianne Elizabeth	57	*Hyannis*	Fanning House
Philip, Philip Louis	V 57		13 Scott
Pierce, John Sturtevant	59	*Leominster*	Estabrook Hall
Pinchak, Joan Ruth	57	*Paterson, N. J.*	Fanning House
Pitt, John Ronald	57		54 Catherine
Plummer, Mrs. Barbara Bowen	H g	*Dudley*	
Podell, Mrs. Harriett Amster	Ps g	*Philadelphia, Pa.*	34 Lakeside Ave.
Podell, Jerome Edward	Ps g	*Philadelphia, Pa.*	34 Lakeside Ave.
Polhemus, Ellen Anne	58	*Belvidere, N. J.*	Fanning House
Pollinger, Elaine	56	*Brooklyn, N. Y.*	Blakeslee House
Pollock, Norman Hall	H S	*Philadelphia, Pa.*	78 May
Pond, David Shepardson	56	*Auburn*	
†Porter, Mrs. Elia Frances	Ed g	*Charlton City*	
Porter, Gerald Donald	V 57		455 Park Ave.
Porter, Wayne Whitimore	V 56	*Holden*	
Potash, Ethel Jean	59		59 Westview Rd.
†Potter, Spencer Romeyn	V Ed g	*Leicester*	
Power, Patricia Rose	57		114 Brookline
Press, Russell George	59	*Wethersfield, Conn.*	Estabrook Hall
Price, Malcolm Ivan	57	*Clinton*	10 Charlotte
Primeau, Elaine Isabelle	56	*Fitchburg*	Blakeslee House
†Proffitt, Mrs. Elizabeth Gates	Ed g		53 Wyola Dr.
Proffitt, George Henry	V 58		53 Wyola Dr.
Raila, Ruth Ann	59		53 Fountain
Raina, Preduman Krishen	H S	*Kashmir, India*	48 Berwick
Rako, Julius	58	*New York, N. Y.*	62 West
†Raphaelson, Arnold Herbert	V Ec S		20 Garland
Raphaelson, Elliott	59		18 Derby
Raphaelson, Milton Howard	V 58		44 Lakeside Ave.
Rauscher, William Charles	V 56		3 Veterans Ave.
Razansky, Donald Brian	59	*Newburgh, N. Y.*	Estabrook Hall
Reed, Ivan Leon	58	*Clinton*	
Rehfield, Joan Audrey	59	*New York, N. Y.*	Fanning House
Reilly, James Alfred	58	*Shrewsbury*	
Rembiszewski, Joseph Paul	59		128 Endicott
Remillard, Arthur Joseph, Jr.	V 56		324 Grafton
Remmer, Harvey Ira	58		78 Upsala
Renny, Edward	G g	*Mandalay, Burma*	35 May
Resh, Fred Leonard	57	*Providence, R. I.*	11 Charlotte
Resnick, Idrian Navarre	58	*Buffalo, N. Y.*	14 Oberlin
Reta, Taye Wuhibe Gabriel	59	*Harar, Ethiopia*	145 Woodland
†Rho, Mann Que	59	*Seoul, Korea*	70 Maywood
Rhodes, Frederick Lawrence, Jr.	56		4 Allen
Ribb, Cynthia Marie	58		15 Windham
Rice, Jerald Arthur	58	*Millbury*	
*Rice, Thomas Frederick	V 57	*Buzzards Bay*	11 Hawthorne
Richard, Alfred Joseph	Ch F		130 Woodland
Richards, Brendon William	V 59	*Oxford*	
Richardson, Anna	58	*Wellesley*	
Richardson, Nancy	59		411 Burncoat
Richason, George Robert, Jr.	Ch g	*Amherst*	
Riordan, Pauline Ellen	G g	*Milton*	24 Gates
*Ritter, Frederic Arnold	G S	*Baltimore, Md.*	898 Main
Robes, Robert Ernest	V 56		7 Hawthorne
Robidoux, Richard Ernest	59	*Brookfield*	
Robinson, Betty Ann	59	*Washington, D. C.*	Sanford House
Robinson, Mrs. Sallie Elizabeth	s		14 Surrey Lane

Name	*Classification*	*Home Address*	*Local Address*
Rockwell, Dale Lawrence	59	*Groton, Conn.*	Estabrook Hall
Rodger, Howard Chase	58	*Hudson*	
Roesmer, Josef	Ch F	*Mainz, Germany*	939 Main
Rogers, Ryland Fuller	V 56		6 Prouty Lane
Rogers, William Francis	59	*Leominster*	Estabrook Hall
Rogstad, Ronald Harry	57	*Winchendon*	60 Downing
Rosenberg, Henry Ernest	Ch S	*Hempstead, N. Y.*	42 May
Rosenthal, Marion Anne	56	*Far Rockaway, N. Y.*	Fanning House
Rossinow, Edward	58	*Brooklyn, N. Y.*	40 Richards
Rossner, Morton	59	*Levittown, N. Y.*	939 Main
Roulet, Mary Anne	56	*Medusa, N. Y.*	Woodland House
Russell, David Alan	56	*Auburn*	
Sacovitch, William James	57		8 Quinsigamond Ave.
†Safka, Anthony Thomas	s	*Gardner*	
St. George, Robert Joseph	V 57	*Warren*	
St. Jean, Diane Barbara	59	*Auburn*	
*St. Jean, Ronald Steven	56	*Holden*	
St. Onge, Remi Louis	V 57	*Southbridge*	
St. Onge, Ronald Ralph	G S	*Riverside, R. I.*	7 Hawthorne
Saitas, James John	V 58	*Putnam, Conn.*	
*Salem, William John	V Ch g		394 Grafton
Samia, Mrs. Sallie Robinson	58		14 Surrey Lane
Sarando, Stephen Plato	58		12 Page
*Sardonini, Joseph Michael, Jr.	56	*Milford*	
Savulis, Anthony Vincent	58	*Auburn*	
Savulis, Mrs. Winifred Jarvis	Ed S	*Auburn*	
Sawtelle, Robert Ulysses	V 57		25 Morningside Rd.
Schanberg, Mrs. Rachel Weinbaum	58		26 May
Schanberg, Saul Murray	B S		26 May
Scheel, Eugene Mehlman	57	*New Rochelle, N. Y.*	100 Woodland
Schoenfeld, Norman	59	*Haverhill*	Estabrook Hall
Schoolman, Leonard Arthur	57	*Mt. Vernon, N. Y.*	36 Richards
Schultz, Barbara Joan	57		31 Lenox
†Scola, Angelo Ralph	59		508 Salisbury
*Sears, Keith Gaskin	57	*Woodstock Hill, Conn.*	
Seifer, Joan Rita	59	*Marlboro*	Woodland House
Seligman, Fred	58	*Rego Park, N. Y.*	11 Charlotte
Sergent, Dorothy Joan	57	*Rutland*	10 Burgess Rd.
Shadbegian, Ronald Walter	V 59		80 Delmont Ave.
Shamoian, Charles Anthony	B S		1 Kilby
Shannin, John	58		21 Richards
Shapiro, Bernard David	57	*Forest Hills, N. Y.*	36 Richards
Shapiro, Paul Jay	57	*New Haven, Conn.*	10 Charlotte
Shaw, Sondra Lee	58	*New York, N. Y.*	Sanford House
Sheleg, Boris	V 56	*Stratford, Conn.*	70 Maywood
Shen, Irene I-chuan	56	*Great Neck, N. Y.*	Blakeslee House
Shen, Shih-Ping	Ph S	*Taipei, Formosa*	670 W. Boylston
Sher, Gary Jay	56	*Brooklyn, N. Y.*	40 Richards
Sherman, John Morton	V G g	*Norwalk, Conn.*	2 Ripley Pl.
Siegel, Stephen Jeffrey	58	*Mt. Vernon, N. Y.*	7 Kilby
†Sigalis, William Charles	56		10 Cottage
Silver, Michael	58		16 Edgewood
Silverberg, Jerry Steven	H g	*Hartford, Conn.*	11 Hawthorne
Silverzweig, Stanley	58	*Laurelton, N. Y.*	905 Main
Simmons, David Jay	B g	*Malden*	59 Maywood
†Simonelli, Mary Lucy	G g		12 Batavia
Sindhvananda, Kanda	Ed g	*Bangkok, Thailand*	46 Tirrell

Name	*Classification*	*Home Address*	*Local Address*
Singer, Shirley Sally	56	*Brooklyn, N. Y.*	Woodland House
Sinnery, Donald James	57		2 Ontario
Siok, Barbara Ann	58	*Clinton*	
*Slater, Donald William	57	*New York, N. Y.*	919 Main
Slepian, Howard Joseph	V Ps g	*Providence, R. I.*	
Slyder, Barbara Louise	59	*Emporium, Pa.*	Blakeslee House
Smelewicz, William Patrick	V 57		3 Ingalls
Smith, Douglas Atkinson	59	*Holden*	
Smith, Harold Dwight	Ed g		34 Canterbury
Smith, Harry William, Jr.	56	*Auburn*	
Smith, Jacqueline Dora	B g	*Princeton*	
*Smith, Marc Paul	56		3 Tahanto Rd.
Smith, Theodore Rubin	57	*Bronx, N. Y.*	40 Richards
Smith, Venice Mae	s	*Farnumsville*	
Snyder, Alan Michael	57	*Staten Island, N. Y.*	16 Gates
Snyder, Betty Ann	59	*S. Lancaster*	
Snyder, Ronald Fred	56	*Albany, N. Y.*	36 Richards
Sobel, Marlene Charlotte	56	*Waterbury, Conn.*	Woodland House
Sokov, Irving Bernard	V 58	*Dorchester*	
†Soncini, Giorgio	Ec s	*Milan, Italy*	5 Norwood
Sondrol, Helen Leblanc	Ed g		79-5 Park Ave.
Sorensen, Richard	V 57		310 Coburn Ave.
Spayne, Robert William	G F		64 Harlem
Speier, Sybil Dorothy	Ps F	*Washington, D. C.*	38 Merrick
Speiser, Marc Herbert	59	*Far Rockaway, N. Y.*	Estabrook Hall
*Spence, Gordon James	s	*Whitinsville*	
Spurr, Arnold Newton	57	*Southboro*	
†Stanhope, Russell Herbert	V Ed g		20 Rich
Stanick, Carol Elizabeth	59		76 Commonwealth Ave.
Stanton, Betty Ann	58	*Clinton*	
Stark, Claude Alain	58	*New York, N. Y.*	16 Claremont
Starzyk, Frederick Henry	V 58	*Framingham*	
*Stead, Anna Marie	Ed g		24 Tiverton Pkwy.
Steele, Frederic Lewis	57	*Boxboro*	17 Crystal
Steffon, Mary Ann	58	*Grafton*	
Stein, Harold Charles	58	*Hudson, N. Y.*	115 Illinois
Steinberg, Lloyd Bernard	57	*Scarsdale, N. Y.*	16 Gates
Steinberg, Morton	V 57		80 Houghton
Steinberg, Norman	57		80 Houghton
Stern, Albert	56	*New York, N. Y.*	40 Richards
Still, Gerald Maxwell	56	*New Haven, Conn.*	36 Richards
Stone, Caryl Joy	59	*New York, N. Y.*	Sanford House
Stout, Thomas McBride	57	*Boston*	Paxton
Strandberg, Arne Eric, Jr.	59	*Shrewsbury*	
Strandberg, Victor Hugo	57	*Shrewsbury*	
Streichler, Allan Martin	56	*Brooklyn, N. Y.*	36 Richards
Strumpf, George Bernard	59	*Lynbrook, N. Y.*	Estabrook Hall
Sudol, Lorraine Agnes	59	*E. Rutherford, N. J.*	Sanford House
Suh, Sang Chul	59	*Namdo, Korea*	Estabrook Hall
Sullivan, Donald William	V Ed S	*Gilbertville*	59 Maywood
†Sullivan, Edward Patrick	V 57		466 Park Ave.
Sullivan, Helen Theresa	57		45 Charlotte
†Sullivan, Michael Vincent	59		45 Charlotte
Surdi, Sylvia Leonarda	Ps g	*Bloomfield, N. J.*	49 Brownell
Swenson, Carl Robert	V 57	*W. Boylston*	
Switzer, Janet	Ps S	*McPherson, Kan.*	85 Chatham
Takeuchi, Nobuhiko	58	*Kobe, Japan*	11 Charlotte

Name	*Classification*	*Home Address*	*Local Address*
†Taylor, Frederic Forrest	s		6 Brookshire Rd.
†Teng, Yuan Chung	H g	*Taiwan, China*	145 Woodland
Terwilliger, Ann Louise	59	*Glastonbury, Conn.*	Fanning House
Teshoian, Sarkis	58		20 Abbott
Thomas, Daniel Walter	Ch F		5 View
Thomashow, Saul Leonard	56		965 Pleasant
Thompson, Richard Gerald	56		3 Minthorne
Thompson, Shelby Walker	56	*Wellesley*	Woodland House
†Todd, Robert Edward	V Ed g		1 Allendale
Toder, Phyllis Sally	59	*Bronx, N. Y.*	Fanning House
Toppin, John Samuel	V 59	*Brookfield*	
Toussaint, Joseph Ludger	V 57	*Fort Kent, Me.*	29 Chestnut
Trachtenberg, Naomi Etta	56	*Brooklyn, N. Y.*	Woodland House
Traina, Angelo John	56	*Flushing, N. Y.*	36 Richards
†Tremblay, Bernard Henry	Ed g		179 Belmont
Trethewey, Ralph Stanley	V 57	*Grafton*	
Troianello, Emilio Joseph	Ch F	*Lawrence*	40 Richards
Tsourides, Konstantine Nicholas	57		84 Madison
Tucker, Barbara Ann	57		40 Brighton Rd.
Tucker, Marvin Estes	V 59	*Brookfield*	
Tully, Edward Luke	H g	*Harvard*	28 Stoneland Rd.
Tuppa, George John	V 59		7 Blanche
Turkson, Yaw Bamful	56	*Samankese,* *Gold Coast, W. Africa*	20 Gates
*Tuttle, Edwin Charles	V 59	*Upton*	
†Tyson, William Reynier	V G g	*Wayne, Pa.*	9 William
Upbin, Sandra Freida	59	*Far Rockaway, N. Y.*	Sanford House
Utsunomiya, Takeshi	57	*Tokyo, Japan*	19 Ripley
Vaitiekaitis, Ann	59		51 Coral
van der Linden, Alfons Joseph	s		Assumption Prep. School
Vandersea, Nancy Ann	59	*Whitinsville*	
van Leeuwen, Philip Carleton	58		9 Euclid Ave.
Vardzal, Mary Barbara	59	*Elizabeth, N. J.*	Sanford House
*Velagapudi, Dutt Lakshmana	s	*Tirunelveli, India*	32 Ripley
*Viau, Rene Jean	V Ed g	*Central Falls, R. I.*	
Vick, Kenneth Stuart	V 58	*Shrewsbury*	
Vierstra, Andrew, Jr.	56	*Whitinsville*	
Vierstra, Katherine Joyce	59	*Whitinsville*	
†Vinkemulder, Charles Bradley	V 58	*E. Grand Rapids, Mich.*	25 Freeland
Vogel, Peter Frank	59	*Teaneck, N. J.*	Estabrook Hall
Vogel, William	Ps S	*Laurelton, N. Y.*	17 Oberlin
Vuona, Peter	59		333 Salisbury
Wabrek, Alan John	59	*Manchester, Conn.*	Estabrook Hall
Waddleton, William John	V 56	*Oxford*	
*Wait, Albert Huntoon, Jr.	57	*Waban*	100 Woodland
Walker, Barry Jay	58		37 Creswell Rd.
Walker, Philip Edward	V 58		15 William
Wallenfels, Ingrid	59		224 Lovell
*Waltz, Mary Eleanor	V 58	*Waldoboro, Me.*	74 Woodland
*Ward, Mary Louise	Ed S		38 Maywood
Warfield, Joan	57		21 Arletta Ave.
Waterhouse, Mrs. Jane White	57	*Holden*	
Waters, Virginia Marie	58		16 N. Steele
Waxman, Norman	58	*New York, N. Y.*	14 Oberlin
Wehrli, Robert William	V 58	*Auburn*	

Name	*Classification*	*Home Address*	*Local Address*
Weinberger, Leon Judah	57	*Clinton*	
Weiner, Leonard Baruch	59	*Brooklyn, N. Y.*	Estabrook Hall
Weinstein, Evelyn Lee	H S	*Chestnut Hill*	24 Gates
Weir, Alastair James	Ps Hon. F	*Glasgow, Scotland*	926 Main
Weisenberg, Gerald Melvin	57	*Floral Park, N. Y.*	42 May
Weisman, Burton Stuart	56		26 Loxwood
Weisman, Peter Ellis	59	*Hempstead, N. Y.*	Estabrook Hall
Westermann, Harland Walter	G F	*Arlington, Va.*	7 Hawthorne
Whitaker, David Alan	59		64 Alsada Dr.
Whittier, Edward Dearborn	V 56		54 Great Brook Valley Ave.
Wightman, James Warren	Ec F	*Carney's Point, N. J.*	Estabrook Hall
Wilensky, Barbara Dee	58		7 Argyle
Wiley, Richard Terence	V 57		82 Elm
Willey, Roy Chester	59		30 Ararat
Williams, Philip Graham	V Ed g		35 Circuit Ave.
*Williams, Roger Irving	56	*Boylston*	
Wilman, James Fletcher	59	*Princeton*	
Wilson, Carol	Ed g		11 Berwick
*Wisniowski, Edward Robert	V Ec S	*E. Longmeadow*	60 Beaver
Wofford, Elois Julliette	H S	*Cleveland, Ohio*	46 Tirrell
Wolfe, Jane Margaret	s	*Fitchburg*	6 Chatham
†Woodall, John Arden	Ed g		580 Pleasant
†Woodis, Ruth Grosvenor	Ed g		79 Elm
*Wray, Norman Leslie	57	*Wilkinsonville*	
Wright, Robert Lewis	56		148 Dewey
Wu, Cheng-Tsu	G g	*Nanking, China*	2 Ripley
*Wuethrich, Chris John	57	*N. Scituate*	16 Marble
Wylan, Louise Mary	56	*Long Island City, N. Y.*	Fanning House
Xanthakos, Jeanne Demetria	59	*Southbridge*	
Yaffe, Monte Earl	56	*Newton*	
Yahnian, Ovsanna Haroutioun	58	*Beirut, Lebanon*	626 Southbridge
Young, Donald Roland	57	*Arverne, N. Y.*	10 Charlotte
Young, Frederick William	58		30 Beaver
Young, George Frederick	59	*Manhasset, N. Y.*	Estabrook Hall
*Young, Mrs. Helen Troy	H g		53 Elm
Yun, Seung Soo	57	*Seoul, Korea*	19 Ripley
Zamanigian, Elizabeth Barbara	56		118 Eastern Ave.
Zambarano, Paul Joseph	58		1 East Park Ter.
Zani, Dominic, Jr.	56	*Wellesley*	
*Zanio, Constance Lee	58	*Kenosha, Wis.*	30 Beaver
Zarr, Gerald Howard	59		17 Kilby
Zarr, Melvyn Herbert	58		17 Kilby
†Zawistowski, Walter Joseph	V Ed g		140 Perry Ave.
Ziarko, Margaret Ann	57	*Webster*	
Ziegler, Barry Michael	59	*New York, N. Y.*	142 Winifred Ave.
†Zraket, Frederick Anthony	V 58	*Lawrence*	11 Hawthorne
Zulauf, Donald Cole	58	*Tenafly, N. J.*	36 Richards

I (2). STUDENTS IN RESIDENCE LESS THAN ONE SEMESTER

Name	*Classification*
Adams, Donald Francis	58
Brotherton, Lynda Beth	58
Byrnes, Mrs. Carole Ann	59
Cherry, Richard Meredith	57
Cogswell, Thomas Michael	59
Cole, Kimyon Robert	58
Delle, Jeanette Roberta	58
Elkind, Bruce Sheldon	58
Fancey, Joan Ruth	57
Hevy, Janet Rosamond	59
Jones, Nancy Clement	59
Jones, Owen Roberts, Jr.	59

Name	*Classification*
Krock, Barry Lawrence	s
Laveson, Brenalea	59
Leal, Jane Elizabeth	58
Leavitt, David Ashley	57
Lynch, Russell Gerald	V 57
MacFadyen, John Alexander	H g
Mantashigian, Robert Moses	s
McBride, Ulysses	H g
McCann, Bernadine Joan	s
Miller, Susan P.	s
Philbin, John Philip	s
Pomeroy, Russell Edwin	V H g
Ramsey, Carol Webster	s
Rintala, Kaarlo Arvid	59
Seery, Michael Eugene	58
Shapiro, Harvey	V Ec g
Ursin, Michael Jay	58
Walsh, John Thomas	V Ch g

II. SUMMER SCHOOL STUDENTS—1955

Abodeely, Michael N. Jr., Worcester
Almasian, Anthony H., Worcester
Almeida, Silverio P., Worcester
Arendes, Mary T., Worcester
Argento, Barry J., Worcester
Arnold, Nancy E., Grafton
Averka, Jacqueline, Auburn
Badt, Annalisa R., N. Grafton
*Bailey, Elaine G., St. Johnsbury, Vt.
*Barcom, Wayne A., N. Adams
Bardsley, Bruce M., Auburn
Bascom, Faith, Holden
Batchelder, Ida, Webster
Bates, Harold M., Dorchester
Beach, Mary Louise, Worcester
Bennett, Edwin H., Auburn
Benuskavich, Daniel J., Worcester
Berke, Birgitta E., Worcester
Besecker, Elva M., Cresco, Pa.
Bilazarian, Ruth, Boylston
Blanchard, Peter, Staten Island, N. Y.
Blumenthal, David H., Worcester
Bobeck, Charles F., Clinton
Bogigian, Robert A., Worcester
Bostic, Mrs. Corrine E., Worcester
Bouffard, Albert J., Worcester
Bowler, Michael, Worcester
Boykin, Chester C., Hartsville, S. C.
Breen, John J., Providence, R. I.
Brotherton, Lynda B., Worcester
Bulcock, Violet, Rutland
Butler, Catherine M., Worcester
*Butler, John J., Belmont
Callahan, Daniel T., Worcester
Cameron, Bernard J., Worcester
Carter, Lorna L., Worcester
Cha, Chung Hwa, Seoul, Korea
Chang, SeWon, Chonan, Korea
Chavoor, Shirley, Worcester
Chiveney, John J., Worcester
Christoph, Eugene C., Erie, Pa.
Clark, Carolyn J., Worcester
Clinedinst, Richard W., Worcester
Clough, Donald J., Spencer
Coghlin, Judith, Worcester
Cohen, Charlotte R., Worcester
Cooper, Gordon H., Leicester
Coppenrath, Alice P., Clinton
Cormier, Carlton F., Winchendon
Coupe, George A., Worcester
Courtney, Richard, Worcester
Cronkite, Mrs. Sharon Lee, Shrewsbury
Currey, Ruth D., Holden
Daniels, R. Bruce, Honolulu, Hawaii
*Davis, Mary M., Hopkinton
DeFusco, William F., Webster
del Olmo, Ginés, Mérida, Venezuela
DeMallie, Gardener G., Jr., Worcester
DePaul, Mrs. Alice V., Worcester
dePlata, Mrs. Katherine, Bogota, Colombia
Derosier, Robert F., Leominster
*Disbrow, John R., Jr., W. Long Branch, N. J.
*Donabedian, Richard K., Worcester
Donnelly, Lucille T., Worcester
Donoghue, Gael F., Worcester
Donohue, James P., Clinton
Duffy, Donna, Leicester
Duryee, Dolores, Worcester
Eid, Joseph, Worcester
Eisenberg, Monique, Worcester
*Farrow, Raymond L., Worcester
Finn, Norman H., Worcester
Flower, David A., Worcester
Foley, Elizabeth M., Worcester
Forzley, Philip, Worcester
Fournier, Clifford W., Worcester
Fulgoni, John H., Worcester
*Gaffin, Alan H., Worcester
Gaucher, Adrian A. Jr., Southbridge
Gay, Clifford C., Leicester
George, Gordon B., Shrewsbury
Gibbons, William M., Shrewsbury
Good, Robert E., New York, N. Y.
*Goss, Richard H., Massapequa, N. Y.
Goss, Robert W., Fitchburg
*Granath, Mary M., Worcester
Granger, Wilfred R., Auburn
Green, Phyllis H., Worcester
Griffin, Carl R., Jr., Rutland
Grigas, William A., Worcester
Guerin, David J., Worcester
*Hacanis, Andrew J., Worcester

---

*Intersession only

Haddad, Herbert H., Worcester
Hager, John W., Leominster
Handleman, Chester, Worcester
Harper, Roy L., Worcester
Harriman, Edward R., Fitchburg
*Harris, Benjamin C., Worcester
Hartwell, June, Leominster
Harvey, Edythe M., Shrewsbury
Haskins, Elizabeth M., Worcester
Heald, Gordon T., Worcester
Helfenbein, Marilyn, Worcester
Herideen, Richard M., Webster
Highberg, Emeline C., Worcester
Hodes, Donald A., Worcester
Houghton, Charles B., Hudson
Howe, Priscilla M., Worcester
Hull, Sam P. Jr., Holden
Iacovone, Julio J., Worcester
Jaeger, Marianne T., Clinton
Jerome, Henry F., Worcester
Johnson, Benjamin A., Worcester
Johnson, Warren E., Leicester
*Johnston, David B., Worcester
Jolie, Richard N., Auburn
Jones, George C., Worcester
*Kaplan, Joseph H., Hagerstown, Md.
Karagheusian, Carl, Worcester
Keddie, Louise Ann, Worcester
Keefe, Joan M., Worcester
Kilcoyne, John F., Worcester
Killian, Dale, Worcester
King, Valerie, Worcester
Kingburne, June M., Worcester
Kingsbury, Billings B., Worcester
Kirk, Robert N., Grafton
Koch, Forrest E., House Springs, Mo.
Koskinas, Emily, Worcester
LaConte, Richard B., Worcester
*Lambert, Muriel, Worcester
Lawler, John B., Worcester
Lawrence, Ethel J., Durham, Conn.
Laws, John S., Worcester
LeBeau, Raoul J., E. Brookfield
Les, Frederick J., Clinton
Lindgren, Maurice R., Worcester
Lister, Victor U., Leominster
Long, Ruth S., Monson
*Lopez, Manuel D., Westfield
Luna, Telesforo W., Jr., Pasuquin, Ilocos Norte, Philippines
Lynch, Frances E., Marlboro
*Lynch, Russell G., Leominster
Lyons, James F., Worcester
Mader, James W., Jr., Wichita, Kan.
Maguire, Richard C., Old Orchard, Me.
Mahoney, Clara, Worcester
Maier, Emanuel, Worcester
Maier, Sylvia, Worcester
Malley, Joseph, Worcester
Manna, George R., Worcester
Manning, Charles W., Hartsville, S. C.
Manos, Charles L., Claremont, N. H.
*Manyak, Dennis D., E. Douglas
Marks, Milton S., Worcester
Matthews, George A., Jr., Worcester
Mayer, Joseph, Asbury Pk., N. J.
Maykel, Midge A., Worcester
McCarron, Paul J., Worcester
McInerny, Marguerite E., Worcester
McKenzie, Robert, Worcester
McKey, Richard H., Jr., Worcester
McKinstry, Josephine A., Southbridge
*McTighe, Doris A., Worcester
Meadows, David L., Worcester
*Mearse, Marie P., Worcester
Melvin, Paul A., Worcester
Mendoza, Walter E., Millis
Merz, Jacob L., Greenfield
Mielnicki, Anne M., Uxbridge
Monkiewicz, Wojciech, Oakdale
Moran, Raymond K., Worcester
Morgan, Mary B., Worcester
Morrison, Donald L., W. Millbury
Mosczynski, Leon H., E. Douglas
Nader, Michael A., Shrewsbury
Nault, Jacqueline, Worcester
Nelson, Virginia G., Worcester
Newell, Alan H., Worcester
Nichols, Mrs. Yukiko S., Worcester
Nordstrom, Barbro, Worcester
Olson, Donald H., Worcester
O'Malley, Ann E., Springfield
O'Malley, James F., Jr., Clearwater, Fla.
Oswell, David D., Worcester
O'Toole, Barbara G., Clinton
Palin, Agnes W., N. Grafton
Panagiotopoulos, Anne D., Worcester
Patterson, Janet A., Worcester
Perry, Francis X., Rochdale
Plunkett, Mrs. Mary M., Worcester
Pond, David S., Auburn
Powers, Frances M., Westboro
Powers, M. Betsy, Worcester
Price, Malcolm I., Clinton
Proffitt, Mrs. Elizabeth G., Worcester
Proffitt, George H., Worcester
Ramsdell, Herbert F., Jr., Worcester
Rancke, Karl W., Worcester
Raphaelson, Milton H., Worcester
Rauscher, William C., Worcester
Remillard, Arthur J., Jr., Worcester
Renaldo, Shirley E., Shrewsbury
Renny, Edward, Mandalay, Burma
Rhodes, Fred L., Jr., Worcester
Ricker, Frances E., Portland, Me.
Ridout, Genevieve, Southbridge
Rivers, Henry C., Worcester
Rizakou, Mary P., Athens, Greece

Robinson, Sallie E., Worcester
Rossman, Paul, Worcester
Rourke, John F., Millbury
Royston, Patricia M., Auburn
Russell, Ralph R., Leicester
Ryan, Terry D., Springfield
Sacovitch, William J., Worcester
Saitas, James J., Putnam, Conn.
Samara, Joseph, Worcester
Samara, Lorice H., Worcester
Samia, Mrs. Sallie R., Worcester
Savat, Nancy M., Worcester
Savulis, Anthony V., Auburn
Savulis, Mrs. Winifred J., Auburn
Schanberg, Saul M., Clinton
Schultz, Betty M., Natick
Schwab, Norman, Worcester
Sears, Leonard F., Worcester
Shamgochian, Alice, Worcester
Shamoian, Charles A., Worcester
Shaw, Arnold R., Worcester
Shea, Emmett, Worcester
*Sheehan, Patrick V., Worcester
Sheleg, Boris, Worcester
*Shepardson, Carole P., Clinton
Sherman, John M., Norwalk, Conn.
Sigalis, William C., Worcester
Simmons, David J., Malden
Simonian, Jean M., Worcester
Sindhvananda, Kanda, Bangkok, Thailand
Skelton, Frederick S., Winchendon
Smith, Harold D., Jr., Worcester
Smith, Jacqueline D., Princeton
Smith, Jane F., Holden
Smith, Leonard C., Auburn
Smith, Sidney B., Whitinsville
Solod, Patricia E., Worcester
Stafford, Priscilla M., Webster
Starbird, Myron E., Farmington, Me.
Stead, Mrs. Anna M., Worcester
Steffon, Mary Ann, Grafton
Steinberg, Morton, Worcester
Steinberg, Norman, Worcester
Sternberg, Ralph, Worcester
Storey, Norma, Toronto, Ontario, Can.
Sullivan, Donald W., Gilbertville
*Sullivan, Neil J., Gilbertville
Sullivan, William T., Braintree
Thomashow, Saul L., Worcester
Tibbetts, Mrs. Margery A., Worcester
Todd, Robert E., Worcester
Todd, Ronald C., Worcester
Tozian, Lillian S., Shrewsbury
Treat, Eleanor, Shrewsbury
Trethewey, Ralph S., Grafton
Tsourides, Konstantine N., Worcester
Tyler, Francis A., Worcester
*Ursin, Michael J., Weston
van Leeuwen, Philip C., Worcester
Vick, Kenneth S., Holden
Von der Heide, John T., Scarsdale, N. Y.
Waddleton, William, J., Oxford
Wallenfels, Ingrid, Worcester
Warden, William E., Oxford
Warfield, Joan, Worcester
Warner, John F., Jr., Clinton
Weaver, Ronald A., Danbury, Conn.
Weinbaum, Rachel, New York, N. Y.
Weinberger, Leon J., Clinton
Weiner, Robert S., Ossining, N. Y.
Weller, Arnold C., Rutland
West, Togo D., Winston-Salem, N. C.
White, William G., Shrewsbury
Wilensky, Barbara D., Worcester
*Willar, Arline, Worcester
Willey, Deane L., Spencer
Williams, Philip, Worcester
Williston, Frank S., Fayetteville, N. C.
Wilson, Carol, Worcester
Woodis, Ruth G., Worcester
Yacalis, George S., Marlboro
Yurkinas, John P., Worcester
Zani, Dominic, Wellesley
Zarrella, Gloria E., Fitchburg
Zarrow, Herbert D., Worcester
Zarynoff, Paul G., N. Grafton

SUMMARY OF STUDENT ENROLLMENT FOR 1955-56

	Men	*Women*	*Men*	*Women*	*Total*
Undergraduate			469	194	663
Freshman	118	64			
Sophomores	115	47			
Juniors	132	45			
Seniors	104	38			
Graduate students			140	51	191
Special students			20	9	29
1955 Summer School			190	105	295
Total			819	359	1178
Less duplications			89	29	118
Net total			730	330	1060

Degrees Conferred

In the Calendar Year 1955

BACHELOR OF ARTS

Cathryn Ann Adamsky
  with High Honor in General Course and
  with Honors in Psychology
Merritt Agabian
Richard Earl Ashley
George LaForest Bailey
Stanley Bank
Richard Kent Blair
Marie Ann Bondanza
Gloria Ann Bouley
Bernice Mary Burdulis
Patricia Ann Burns
Herbert Hartley Butterworth
Bryant Walter Card
**Marilyn Cooke Carlon
*Francis Leslie Carney, Jr.
Joan Nelson Calverley
  with Honor in General Course
Sally Ann Chapman
Bryant Lee Conant
Donald Wayne Cowen
Robert Lee Crawford
Paul Walter Crowley, Jr.
Michael Jerome Daspin
Edmund Rushmore Dawson
William Joseph Demers, Jr.
Elliot Maurice Ephriam
Nancy Ann Feldt
Martin Barry Flint
Martin Joseph Foley, Jr.
Janet Mae Fregans
Joan Wilder Gannon
Suzann Mary Gilrein
Julian Morton Goldstein
Hedda Ruth Grossman
Robert Francis Guerrin
Donald Bruce Gurry
Rhoda Rogosin Gurwitz
  with High Honor in General Course
Sally Irene Guthrie
Herbert Howard Hoffner
  with Honor in General Course
Robert Philip Holmes
Louise Iarussi
Carlotta Althea Jencks
Stephen Lester Jennings
Nancy Ann Johnson
Elaine Revolti Kapanen
Mildred Katz
Robert Fabian King
Sanford Marshall Kirshenbaum
*Costas James Labovites
Donald Richard LaBrie
Norman Raymond Laine
Irwin Stuart Lamm
*Robert Anthony Marsella
Alice Louise Martin
  with High Honor in General Course
Brian Mate
Constance Anne Mathews
  with Honor in General Course
Jan Kasimir Michalski
Francis William Noponen
Chris George Pallas
Fred Walter Parker
Elaine Isabel Potter-Bernier
Eleanor Burnap Reddington
Joan Frances Riordan
Joan Bernice Roberts
Henry Ernest Rosenberg
  with Honors in Chemistry
Carl Lester Rosengart
  with High Honor in General Course
Lennart Reino Salo
Carol Hazel Schotte
Diane Irma Schulhoff
Jerome Howard Schweitzer
Nathaniel Abram Shapira
Wasily Shepeluk, Jr.
Rolland Victor Siegel
Sandra King Sivert
  with Honor in General Course
Raymond Rodolphe Smith
Seymour Arnold Solomon
Stephen Steinbrecher
Herrmann Otto Stekler
  with Highest Honor in General Course and
  with Honors in Economics and Sociology
Donald William Sullivan
Birgit Marie Sundquist
John Tateosian
Alvin Elliott Taylor
Robert Austin Tibbetts
  with Honor in General Course
  and with Honors in English
Carol Tomajan

---

*Degree awarded "as of" June 6, 1954
**Degree awarded "as of" June 7, 1953

Lois Speckter Traub
with High Honor in General Course
Alden Eames Whitney
with High Honor in General Course
Dorothy Nina Whitney
Robert Hascal Wicks
Elizabeth Ann Zolnowski

BACHELOR OF BUSINESS ADMINISTRATION

Lawrence Paul Barse
Edward Sarkis Bilzerian
Robert Emmett Borglund
Russell Louis Boucher
*Paul Richard Bruso
Conrad Peter Caligaris
with Honor in General Course
Keith Hiram Corkum, Jr.
Henry Giles Cosman
James Henry Finneran
Melvin Hugh Gerrol
Leroy Henry Ham, Jr.
Paul Edwin Handleman
Ara Paul Heroian
Theodore Herbert Hurwitz
Charles Kenneth Hutchinson
George William Koutsoubas
Arthur Malcolm Lasoff
Robert Bernard Levy
John William Mahar, Jr.
Clifford Irving Nordwell
Peter John Plakstis, Jr.
Richard William Prensner
Vincent Peter Pusateri
John Nicholas Rassias
Henry Victor Saltzman
*Edwin Eugene Sherburne
Barbara Hartwell Simpson
Luis Alberto Villa
Arnold Irving Zaltas

MASTER OF ARTS

Khattab Saggar Al-Ani
Wafiq Hussian Al-Khashab
Phyllis Rita Boucher
Warren Hepburn Burton, Jr.
Patricia Fitzsimmons Carini
Rolf Juergen Stefan Diekmann
Woodford McDowell Garrigus
Margaret Joan Goodfellow
Miasnig Hagopian
George Criton Socrates Inglessis
Harold Charles Jigarjian
Stanley Melvin Klainer
Emma Kraidman
Jane Louise Larson
Stanley Mackun
Gerald Francis Madaus
Alfred Joseph Richard
Michael Eugene Somers
Daniel Walter Thomas
John Thomas Von der Heide, Jr.
Lindsley Elliott Webster

MASTER OF ARTS IN EDUCATION

Charles Stephen Burke
Gracia Marion Burkill
Vincent George Carvalho
Sallye Joyce Dawson
Eric Martin Friedmann
Henry Francis Leary
Raymond Joseph Martel
Allen Currier Pratt
Anna Camilla Shaughnessy
John Roberts Wason
Darryl Alexander Wiejaczka
Albert Vito Witt

DOCTOR OF PHILOSOPHY

Louis Peter Carini
Eliahu Caspi
John Robert Dunkle
John Hurley Flavell
Alfred Emmanuel Goldman
Alvin George Goldstein
Vincent Leo Hughes
Urban Joseph Linehan
Harriet Ruth Long
Paul James McCarthy
Carrie Josephine Moyer
Richard Rainer Randall
Richard William Reed
Karl Stacey
Merrill Augustus Symonds
Henry William Von Holt, Jr.

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*Degree awarded "as of" June 6, 1954

HONORARY DEGREES

Robert Cutler	Doctor of Laws
Oliver Mills Hayden	Doctor of Science
Laurence Dudley Stamp	Doctor of Laws
George Leslie Stout	Doctor of Letters
Robert Morse Woodbury	Doctor of Laws

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CLARK UNIVERSITY

Sixty-sixth Annual Commencement

Worcester Memorial Auditorium

SUNDAY, JUNE 3, 1956

WORCESTER, MASSACHUSETTS

Order of Exercises

Organ Music
  Chorale Prelude *Bach*
  Concerto No. V *Handel*

Processional
  Grand March (from *Tannhauser*) *Wagner*

Invocation Rabbi Joseph Klein

Welcome by the President Doctor Howard Bonar Jefferson

Commencement Address Lester Bowles Pearson
The Secretary of State for External Affairs,
Dominion of Canada

Conferring of Degrees

Benediction Rabbi Klein

Recessional
  Pomp and Circumstance *Elgar*

The audience will kindly remain
standing during the recessional

Organist: Clifford Fowler Green

Candidates for the Degree of Bachelor of Science in Business Administration

Albert Joseph Bouffard
Joseph Robert Eid
John Francis Kilcoyne
Paul Rossman

Candidate for the Degree of Bachelor of Science in General Studies

Tamara Dagmar Lasberg

Candidates for the Degree of Bachelor of Business Administration

Philip Weston Atkinson
Gediminas Mike Basiulis
David Milton Bean
Robert Stanley Bossman
Robert Earl Brownlow
Frank Stevenson Burton
*Daniel Thomas Callahan
Robert Irving Chase
Daniel Dargie, Jr.
Francis Bruce Dion
John Richard DiVerdi
Roy James Dodd
Richard Allen Escolas
John Michael Griffin
*Richard Knight Henderson
*David Bergen Johnston
John Joseph Kelly
Lawrence Dominic Leone
Bruce Alber Maxwell
Raymond Bertram Multer
Soltan Saïd Nazemi
Donald Hillier Olson
Louis Dominic Patracone
David Shepardson Pond
Wayne Whitimore Porter
Arthur Joseph Remillard, Jr.
Frederick Lawrence Rhodes, Jr.
Ronald Steven St. Jean
Saul Leonard Thomashow
William John Waddleton
Edward Dearborn Whittier
Roger Irving Williams
Monte Earl Yaffe
Dominic Zani, Jr.

Candidates for the Degree of Bachelor of Business Administration with Honor

Ernest Mayer Lander *with Honors in Business Administration*

Robert Harvey Lander *with Honors in Business Administration*

James Moniz *with Honor in General Course and with Honors in Business Administration*

Candidate for the Degree of Bachelor of Business Administration with High Honor

Wesley Elbert Forte *with High Honor in General Course and with Honors in Business Administration*

**As of June 5, 1955*

Candidates for the Degree of Bachelor of Arts

William Cheney Allard
Cecil Iris Allmon
June Margaret Allstrom
Anthony Harry Almasian
Elaine Gertrude Bailey
Bruce Morgan Bardsley
Anastasia Bassios
Edwin Howe Bennett
Kenneth Gordon Bunker
Elinor Beth Caplan
Arthur Wallace Carlson, Jr.
Shirley Marie Chavoor
Frederick Clifford Cohen
Harris Irving Cohen
Richard Paul Companion
Sharon Blue Cronkite
Myra Leah Croog
Nobert Alvin Daigle
Joseph John Dyer
Lincoln Loring Engstrom
Raymond Leonard Farrow
Richard Henry Goss
Louis Hunter Greenwood
William Anthony Grigas
Bruce Wallace Haims
June Hartwell
John Bernard Herman, Jr.
Charles Bennett Houghton
Neal Jay Hurwitz
Stephen Isaacson
Ann Marie Jackola
Sandra Paula Jennings
Janet Helen Jowise
Marjorie Alice Kay
*Valerie King
Benjamin Zalman Klein
Anna Angela Kottis
George Herbert Kronberg
Paul Taylor Lavigne
Ralph Patterson Lincoln
Barbara Jane Lindblom
Ruth Stoddard Long
Manuel Dennis Lopez
Gary MacConnell
Kenneth Magiday
George Robert Manna
David Vandlan Matthew
Robert Allen McQuaid
Paul Alan Melvin
Rena Toby Mogil
Marilyn N. Morin
Joseph Nathan
Carol Evelyn Norcross
Anne Demetrios Panagiotopoulos
Elaine Pollinger
Elaine Isabelle Primeau
William Charles Rauscher
Ryland Fuller Rogers
Marion Anne Rosenthal
Mary Anne Roulet
David Alan Russell
Boris Sheleg
Gary Jay Sher
Shirley Sally Singer
Harry William Smith, Jr.
Marc Paul Smith
Ronald Fred Snyder
Albert Stern
Gerald Maxwell Still
*Neil Joseph Sullivan
Richard Gerald Thompson
Shelby Walker Thompson
Naomi Etta Trachtenberg
Angelo John Traina
Yaw Bamful Turkson
*William Ernest Warden
Burton Stuart Weisman
*Arnold Clare Weller, Jr.
*Frank Samuel Williston
Louise Mary Wylan
Elizabeth Barbara Zamanigian

**As of June 5, 1955*

Candidates for the Degree of Bachelor of Arts with Honor

Linda Cohn Gurry *with Honors in History*

Barbara Ann Ware Holmes *with Honor in General Course*

Winifred Ray Hubbard *with Honor in General Course*

Nicholas Augustus Longo *with Honors in International Relations*

Gaynell Ruth McAuliffe *with Honor in General Course*

Victoria Manos Petrides *with Honor in General Course and with Honors in Chemistry*

Robert Ernest Robes *with Honor in General Course*

Candidates for the Degree of Bachelor of Arts with High Honor

Thomas Julius Anton *with High Honor in General Course and with Honors in History*

San Ok Paik *with High Honor in General Course*

Frederick James Samaha *with High Honor in General Course*

Irene I-chuan Shen *with High Honor in General Course*

Marlene Charlotte Sobel *with High Honor in General Course and with Honors in Psychology*

Candidates for the Degree of Bachelor of Arts with Highest Honor

Joan Engstrom Allard *with Highest Honor in General Course*

Herbert Richard Ellison *with Highest Honor in General Course and with Honors in Chemistry*

Candidates for the Degree of Master of Arts in Education

Forrest Andrews
Barry Argento
Eugene Charles Christoph
Libro Ciani
Carolyn Janet Clark
Raymond William Colby
Robert Harold Consolmagno
John Joseph Dwyer
Thomas Francis Gilmartin
Victor William Haggar
Clifton Henry Hulbert
Robert Henry Hutchinson
James Malcolm Kemp
Donald Richard LaBrie
Edgar Dana Lord
Donald Thomas Nicholson
Winifred Jarvis Savulis
Arnold Robert Shaw
Kanda Sindhvananda
Harold Dwight Smith, Jr.
Anna Howe Stead
Robert Edward Todd
Bernard Henry Tremblay
Carol Wilson
John Arden Woodall
Ruth Grosvenor Woodis

Candidates for the Degree of Master of Arts

Biology

Vernon Ahmadjian
Saul Murray Schanberg
Charles Anthony Shamoian
David Jay Simmons

Chemistry

William John Salem

Economics and Sociology

Michael James Murphy
Arnold Herbert Raphaelson
James Warren Wightman

Geography

Ali Mohammed Al-Mayah
Eugene Sheu Theung Chin
Pearl Mildred Corea
Raquel Maria de León P.
Aubrey Diem
John Louis George
Telesforo Wisco Luna, Jr.
John William Pawling

History, Government, and International Relations

James Walter Mader, Jr.
John Richard Pavia, Jr.
Preduman Krishen Raina
Ralph Sternberg

Physics

Shih-Ping Shen

Psychology

Margery Bodansky
Marguerite Prentice Ford
Robert Samuel Liebert
Audrey Jane Mishler
Sybil Dorothy Speier

Candidates for the Degree of Doctor of Philosophy

Chemistry

Vsevolod Mihajlov
Arnet Lauriston Powell

Economics and Sociology

Deane Chalmers Carson
William Adolphus Osborne
Walter Henry Zukowski

Geography

Bart Jacob Epstein
George Marvel Howe
Clara Rom Lougee
Bruce Crossan Ogilvie
Guy Norris Parmenter
Kripa Nath Varma

History, Government, and International Relations

Benjamin Shwadran

Psychology

Peter Elia Comalli, Jr.
Robert Granville Harlow
Thomas Basil Mulholland, Jr.
Lillian Gottesman Raeff
Bernard Philip Rosenblatt

Conferring of Honorary Degrees

EDWIN GARRIGUES BORING *Doctor of Science*
Presented by Heinz Werner

HENRY CHASE MARBLE *Doctor of Science*
Presented by David Potter

HAROLD MANTON SMITH *Doctor of Science*
Presented by Percy Martin Roope

LESTER BOWLES PEARSON *Doctor of Letters*
Presented by James Ackley Maxwell

THE PRENTISS CHENEY HOYT PRIZE IN POETRY

First Prize: Gerald Melvin Weisenberg

Honorable Mention: David Allen Peirce
Diane Barbara St. Jean

THE LORING DODD PRIZE IN DRAMA

First Prize: Richard Gerald Thompson

Honorable Mention: Philip Forzley
Winifred Ray Hubbard

THE HOMER P. LITTLE AWARD IN GEOLOGY

George Bradford Oickle

$\Phi(T)=2\pi\int_V \varphi(r)n(r,T)r^2dr.$

Science Approach at

CLARK UNIVERSITY

ORCESTER 10, MASSACHUSETTS

CLARK UNIVERSITY BULLETIN

NO. 221 OCTOBER 1955

the science approach at
CLARK UNIVERSITY

...a brief introduction to the
studies essential to a well-
founded career in science.

The Bulletin is published January, February, August, September, and October. Entered as second-class matter December 29, 1920 at the Post Office at Worcester, Mass., under the Act of August 24, 1912. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized January 24, 1921.

how the liberal arts insti

Often we at Clark are asked, "Why should I go to a liberal arts institution such as Clark University to further my science career?"

This is a good question, but I think we have an equally good answer which we have stated in this booklet.

There is confusion in the minds of many people as to the meaning of liberal arts. It is frequently assumed that the liberal arts stand in opposition to the sciences. Nothing could be farther from the truth, because the liberal arts *include* the sciences. Indeed, the colleges of liberal arts are often, and accurately, referred to as colleges of arts *and* sciences. Basically, the answer to the question as to what kind of institution can help one prepare for a science career is to be found not in argument but in performance and accomplishment. Thus, as a result of a recent study of the collegiate origins of scientists it was discovered that among the fifty institutions at the top of the list—Clark was eighteenth—the vast majority were colleges and universities concentrating on liberal arts. Only six in the first fifty were technological institutions.

fosters science careers . . .

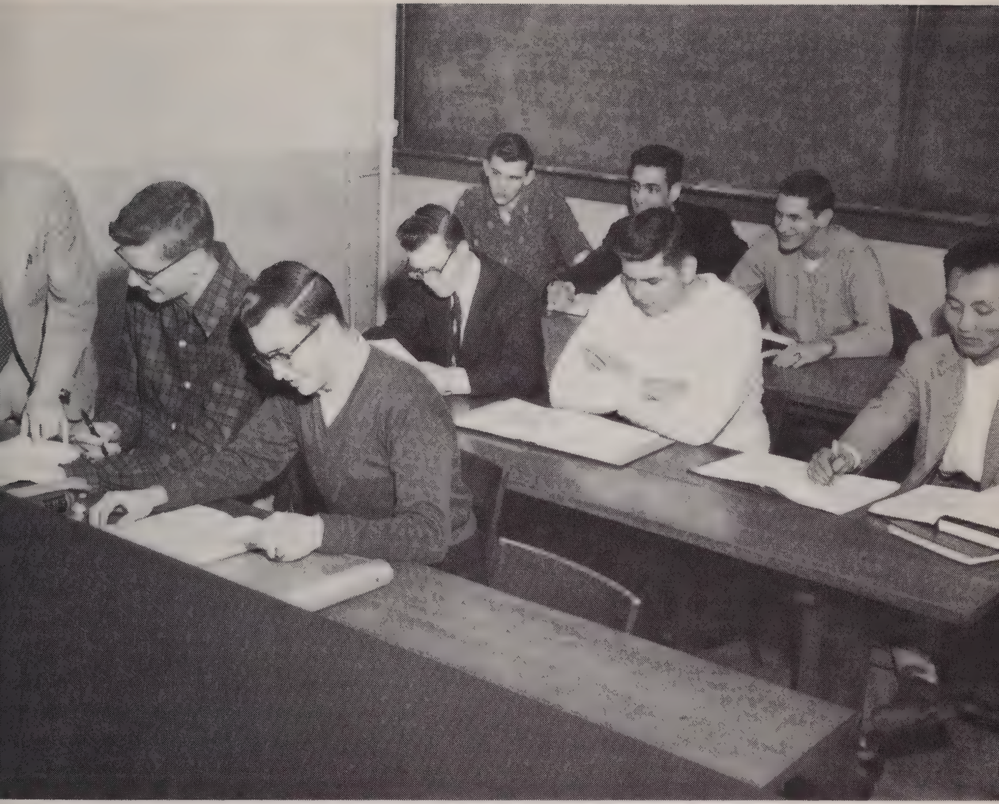
At Clark, each of the departments of Biology, Chemistry, Mathematics and Physics offers a program of concentration for undergraduates and also a program of graduate studies. The research abilities of the faculty in these fields are such that hundreds of thousands of dollars come to the University each year in support of research projects. Clark's alumni who concentrated in the sciences hold important positions in such industrial organizations as du Pont, Monsanto Chemical Company, Standard Oil, Bell Telephone Laboratories, General Electric Company, Westinghouse Electric Company, and many more. Others hold professorships in leading colleges and universities. Still others are outstanding physicians and dentists.

It is our conviction that the most creative scientists are those whose education is based on the understanding of the basic principles and methods of science, and insight into the relations among the sciences and between science and other areas of knowledge. I hope that you will gain an appreciation of Clark's approach to science from reading these pages.

Howard B. Jefferson
PRESIDENT

One of Clark University's distinguished men in Physics was Professor Goddard, the pioneer researcher in field of rockets. It was in Clark's laboratories that Professor Goddard developed the first liquid fuel rocket.

George R. Harrison, Dean of Science at Massachusetts Institute of Technology recently said, "It is becoming increasingly apparent that the best way to educate an applied physicist, and even an engineer, is to give him as broad and basic a training as he can take and postpone his specialization as long as possible."



Doctor Roope, Professor of Physics and Head of the Department of Physics, conducts an undergraduate class in the study of nuclear physics.

Physics

The study of Physics at Clark University is a personal thing, where instructor and pupil work closely together in small groups. Here the balance of laboratory and classroom work is so planned as to produce thoughtful, self-reliant students. The curriculum takes full advantage of ever-expanding areas of opportunity offered today's physicist. The well-grounded foundation provided at Clark will enable a student to enter one of the many specialist fields in either the basic or applied science fields.

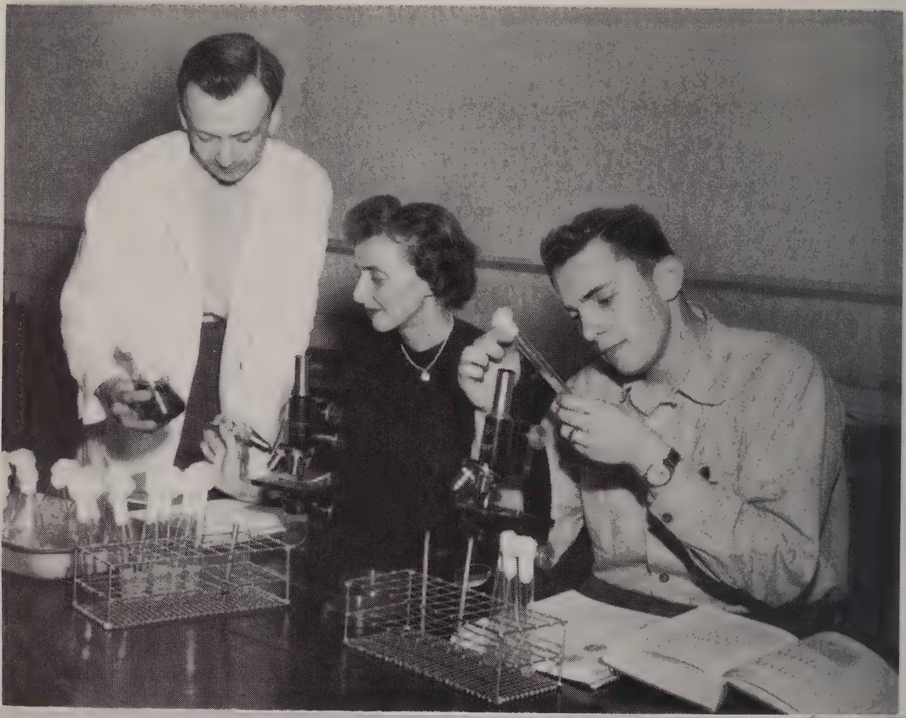
Graduate students discuss the next step in a project with Dr. Gerson Kegeles (center) who is considered one of the country's outstanding physical chemists in the field of diffusion.

A significant quotation, especially true of the chemical field, was made by Bertrand Fox, Director of Research, Harvard Business School. He said, "The dynamic character and continued growth of our economy, improvements in our standard of living, and the vigor of our competitive enterprise system depend to a considerable extent on the development of new products, improvement in quality of established products and the successful search for more effective and economical methods of production."

Undergraduate study in the laboratory, where students get a sound fundamental background.

Chemistry

Since its beginnings Clark University has laid great stress on two basic principals in the Department of Chemistry. The first is the fundamental approach offered to undergraduates to train their abilities and channel their thought and not to stress specific technics. And the second is the active program of graduate study where a diversified continuous research program has produced and is continuing to produce significant results in products and men.



Graduate students working on bacterial cultures as part of their pre-medical training program.

Clark University has a comprehensive pre-medical program which has a splendid record of enabling better students to open doors to the best medical schools, and achieve top ranks in their medical school classes. While the road for the pre-medical student is long and hard, Clark's program provides the balanced foundation to enable the student to cope with advanced technical study.

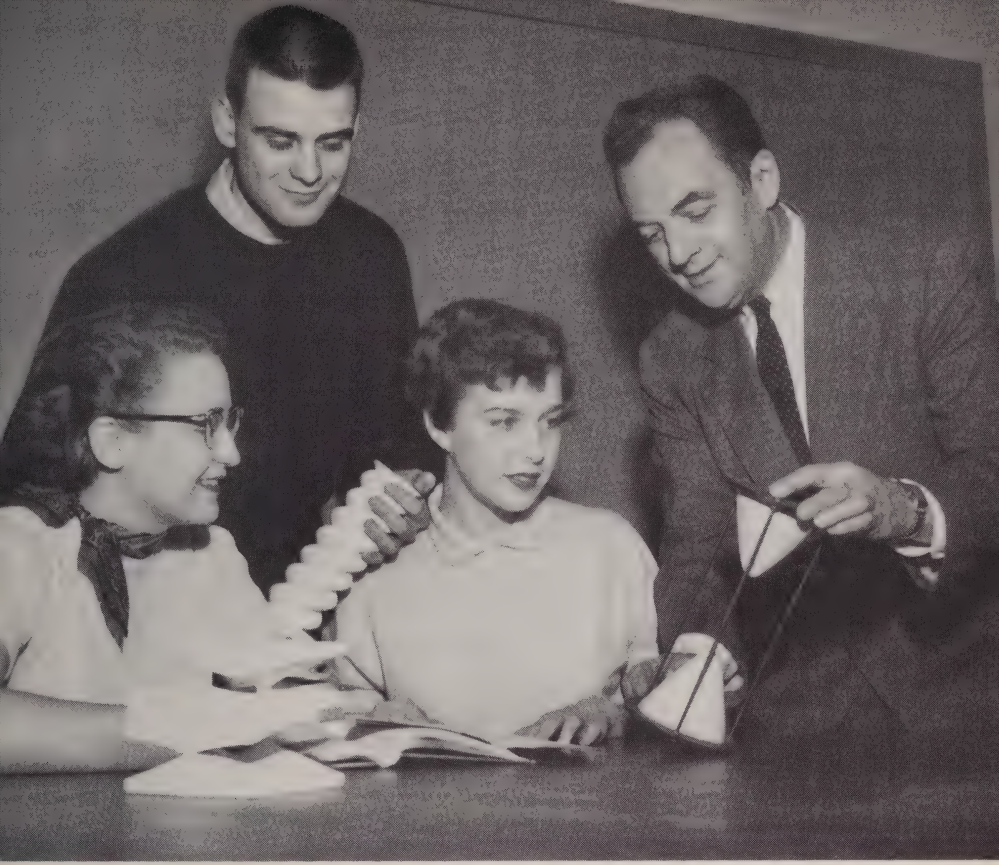
Professor Nunnemacher, Associate of the Department of Biology, employs biological models to illustrate brain development to a group of advanced students.

Biology

The biological laboratories at Clark are very well equipped for the range of courses offered to undergraduates, and contain special equipment for advanced investigation. Students are encouraged to work closely with instructors, and advanced students work in concert with the graduate students. Such an academic atmosphere encourages and stimulates intellectual growth.

Professor Bumer, Head of the Department of Mathematics, studies a three-dimensional model of a complex mathematical expression.

Clark University offers students mathematical courses in three general areas of study. First, the student is offered courses leading to an undergraduate major in mathematics and, ultimately, a masters degree in mathematics. Second, science students are offered the range of mathematics courses necessary to the study of the physical sciences. Third, students are offered courses in fundamental concepts of mathematics designed to emphasize the humanistic aspects of the subject.



Students gather around Professor Bumer as he discusses a mathematical concept illustrated in a quadric surface.

Mathematics

In the sciences, mathematics is the catalyst, bringing the searchers' efforts to an effective, orderly conclusion. At Clark University the effort is made to stress mathematics as a pure science. Students are given the best and broadest base for sound mathematical thinking. The ability to use a single mathematical concept in widely diverse situations gives the Clark student the advantage over the student trained in applied mathematics in a specific field.

Distinguished Science Alumni

Clark University is justly proud of the large number of graduates currently employed in the science fields. A recent survey was made of 535 Clark Science Alumni in an effort to find where they were working and what their jobs were in their various fields of activity. Here are a few brief statistics gleaned from the findings:

Of the 535 Clark Science Alumni—
217—are employed in various industries
140—are employed in educational fields
79—in College teaching
56—in Secondary School teaching
5—in College Research programs
54—are employed in Government Research
124—are Professional Physicians, and Dentists

The industries and institutions employing Clark Science graduates in their various capacities are among the leaders in industry and education in America. For example:

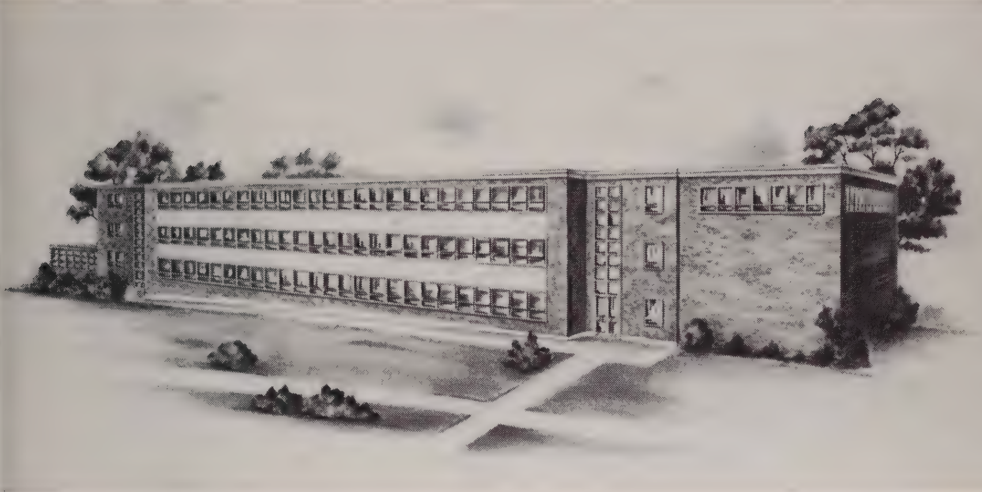
Clark Science Alumni are employed by these industries—

Allied Chemical and Dye Corp.
American Cyanamid Co.
Ciba Products Co.
Dow Chemical Co.
E. I. duPont de Nemours and Co.
Eastman Kodak Co.
Esso Research and Engineering
General Aniline and Film Corp.
Lever Brothers and Co.
Merck & Co.
Monsanto Chemical Co.
Seiberling Rubber Co.
Standard Oil Development Co.
The Texas Co.
Union Carbon and Carbide Corp.
U.S. Rubber Co.

Aluminum Company of America
American Steel and Wire Co.
Colorado Fuel and Iron Co.
Kaiser Aluminum and Chemical Co.
National Lead Co.
Aircraft Radio Corp.
Bell Telephone Laboratories
General Electric Co.
Raytheon Manufacturing Co.
Sylvania Electric Products
American Optical Co.
Chrysler Corp.
Crompton and Knowles Corp.
Dennison Manufacturing Co.
Ford Motor Co.
International Business Machine Co.

—and various other leading industries.

In the educational field, more than 125 universities and colleges have Clark Science Alumni on their faculties, many of Clark graduates are department heads or carry full professorships.



Architectural drawing of the new Chemistry Building to be erected in the near future on the Clark University campus. The new three-story building will house the most modern chemistry laboratories and research facilities.

Clark University is embarked on a science program that looks to the future. Current plans call for a great increase in the facilities devoted to the natural sciences. The new Chemistry Building will provide 27,000 additional square feet of modern laboratories and research facilities as well as a multi-purpose lecture hall to seat 200 students and a departmental science library. In addition to the expansion program for the Department of Chemistry a large sum of money has been budgeted for increasing and improving the Physics and Biology Departments' instruction and research facilities. Thus Clark University's program to expand its facilities for undergraduate and graduate instruction and research in the sciences is geared to the rising tide of enrollments faced by all colleges in the next 15 years.

While the forward planning has been going on, there has been no slacking in the recent research undertaken by the University. For instance, in the chemical field, important projects carried on by the staff during the past four years have brought in over $265,000 in research grants from industrial companies, government agencies and foundations.

Interesting and Varied Courses in Science Subjects

In a small folder it is not possible to list all of the details of the courses offered in the four major science subjects discussed in brief in this booklet. The courses noted below are part of a general program leading to a Bachelor of Arts degree or graduate work leading to the degree of Master of Arts or Doctor of Philosophy. Some of the courses listed may not be given in concurrent semesters.

Department of Physics

For Undergraduates—

- An Introduction to Physical Science
- General Physics
- History of Physics
- Heat and Thermodynamics
- Optics
- Introduction to Modern Physics
- Fundamentals of Electronics

For Advanced Undergraduates and Graduate Students—

- Theoretical Mechanics
- Electricity and Magnetism
- Advanced Electronics
- Theoretical Spectroscopy
- Experimental Spectroscopy
- Theoretical or experimental work in mechanics, thermodynamics or nuclear physics. (Honors course)
- Theoretical or experimental work in optics, electronics, or spectroscopy. (Honors course)
- Nuclear Physics

For Graduate Students—

- Theoretical Physics
- Research in Experimental Physics
- Research in Theoretical Physics

Department of Chemistry

For Undergraduates—

- General Chemistry
- Organic Chemistry
- Gravimetric Analysis
- Volumetric Analysis

- Chemical Principles
- Physical Chemistry
- Advanced Organic Synthesis
- Physico-Chemical Methods
- Organic Qualitative Analysis

For Advanced Undergraduates and Graduate Students—

- History of Chemistry
- Molecular Structure
- Reaction Mechanisms
- Advanced Physical Chemistry
- Colloid Chemistry
- Thermodynamics
- Statistical Mechanics
- Advanced Organic Chemistry
- Organic Chemical Reactions
- Heterocyclic Compounds
- Quantum Chemistry
- Advanced Inorganic Chemistry
- Radiochemistry
- Principals of Analytical Chemistry
- Chemistry of Less Familiar Elements
- Coordination Compounds
- Principles of Instrumental Analysis
- Current Topics in Chemical Literature

Department of Biology

Special note must be made of the very comprehensive pre-medical training program offered by the Department of Biology. Clark students with ability have little difficulty in entering the best medical schools, and usually rank well in the forefront of their medical school classes.

For Undergraduates—

- General Biology
- Comparative Anatomy
- Seminar in General Biology
- Botany
- Invertebrate Zoology
- General Animal Ecology
- Genetics
- Human Anatomy and Physiology

For Advanced Undergraduates and Graduate Students—

- Advanced Systematic Botany
- Economic Botany
- Bacteriology
- Advanced Genetics
- Neuro-anatomy
- General Physiology
- Endocrinology
- Advanced Physiology

Entomology
Histology
Embryology
Parasitology
Circulation and Respiration
Biochemistry
Microtechnique

For Graduate Students—

Reading and Research in Anatomy
Plant Morphology
Readings and Research in Zoology
Readings and Research in Physiology
Enzymology
Advanced Studies in Biology

Department of Mathematics

The department of mathematics is pleased to announce that during the year 1956, Clark University is offering courses leading to a masters degree in mathematics. Because of this forward step there may be additional graduate courses not listed below.

For Undergraduates—

Freshman Mathematics
Calculus
Intermediate Calculus and Differential Equations
Mathematical Statistics
Fundamental Concepts of Elementary Mathematics

For Advanced Undergraduates and Graduate Students -

Advanced Calculus
Modern Algebra
Introduction to Complex Variables
Advanced Differential Equations
Introduction to Analysis
Solid Analytic Geometry and Projective Geometry

In a brief list such as noted on the last few pages it is not possible to list all the descriptive matter pertaining to each course. Full information on all courses offered by the University, as well as supplementary data on specific subjects may be had merely for the asking. If you are "science-bound" it will pay you to investigate the many advantages offered by Clark University. Just fill in, clip and mail the postcard.

Education for Adults

THE EVENING COLLEGE

CLARK UNIVERSITY

FALL 1955

Calendar

September 12–16, Monday through Friday—Registration, 6:30 to 8:45 p.m.

September 17, Saturday—Registration, 9:00 to 12:00 m.

September 19, Monday—Fall term classes begin. Late registration commences.

October 7, Friday—Last date for late registration.
Second tuition installment due.

October 21, Friday—Third tuition installment due.

November 4, Friday—Final tuition installment due.

November 11, Friday—Last date for change in auditor or credit status.

November 23, Wednesday—Thanksgiving recess commences at close of classes.

November 28, Monday—Thanksgiving recess ends. Classes resume.

December 17, Saturday—Christmas recess commences at close of classes.

January 2, Monday—Christmas recess ends. Classes resume.

January 16, Monday—Final examinations begin.

January 23, Monday—Spring term registration commences.

Education
for Adults

Fall Term, 1955

THE EVENING COLLEGE
OF CLARK UNIVERSITY

Main Street, Worcester 10, Massachusetts

TELEPHONE PL 6-1525

The Evening College of Clark University

OFFICERS OF ADMINISTRATION

Howard B. Jefferson, President of the University
Robert M. Hyde, Director, the Evening College

THE EVENING COLLEGE BOARD

H. Donaldson Jordan
Frederick W. Killian
Joseph A. Nordstrom
J. Richard Reid
Percy M. Roope
Seymour Wapner

General Information

The Evening College, established in 1953 as an institution devoted to adult learning, has three primary functions. With the conviction that education in our modern society must be a life-long process, it provides university education for adults of all ages who seek further knowledge and personal development through selected studies in the broad areas of the liberal arts. Further, in recognition of the rapidly developing and changing needs of business and the professions, it provides courses designed to help working men and women improve their occupational skills and to prepare for positions of increased responsibility.

Secondly, the Evening College provides an opportunity for adults to earn the bachelor's degree, exclusively by evening study, through programs planned to meet the unique educational needs of the mature person. Formal programs are available leading to the Bachelor of Science degree in either General Studies or Business Administration. In June, 1956 the Evening College will graduate its first class of degree candidates.

Finally, as a community service, the Evening College organizes frequent non-credit short courses, institutes and seminars tailored to the specific needs of various civic, professional and business groups. Information regarding such services should be addressed to the Director.

ADMISSION

In general, admission to the Evening College is open to all interested adults seeking to further their education. High school graduation, though not required, is desirable. Continued attendance is contingent upon evidence of ability to profit from the instruction offered. Admission to candidacy for a degree will be granted only upon satisfactory completion of a minimum of 15 and a maximum of 30 semester hours credit.

EDUCATIONAL COUNSELLING

Adults seeking information and assistance regarding their educational plans are welcome to consult a member of the Evening College staff at any time. The Evening College office is open daily, from 9:00 until 4:30 p.m., throughout the year, and from 6:30 until 8:30 p.m. Monday through Thursday during the winter and spring semesters.

During the summer of 1955, the Evening College office will be open evenings for student consultation according to the following schedule:

Through August 11—6:00 to 8:00 p.m., Mondays and Wednesdays.
August 17–September 6—6:30 to 8:30 p.m., Wednesdays only.
Commencing September 6—6:30–8:30 p.m., Monday through Friday.

Students working for a degree are urged to consult a member of the staff regarding their program prior to or during each registration period.

THE BACHELOR OF SCIENCE DEGREE

The Evening College awards the Bachelor of Science degree in General Studies or Business Administration upon successful completion of a prescribed program of 120 semester hours credit. Approximately one-third of the credits are earned in the field of major interest, another third in the liberal arts courses not a part of the major, while the remaining third are chosen as free electives. The average length of time required for completion of the program is eight years. Credits transferred from other institutions may substantially reduce the credits to be earned at Clark.

Adults who plan to enroll for a program of studies leading to either degree are urged to consult a member of the Evening College staff as far as possible in advance of the semester in which they plan to register. Official transcripts of work completed at other institutions should be forwarded at the request of the applicant directly to the Evening College, 950 Main Street, Worcester 10, Massachusetts.

DEGREE PROGRAMS

The Bachelor of Science Degree in General Studies

1. English Composition and Literature . . . . . . 6 semester hours

2. Group A (Science and/or Mathematics) . . . . . 12 semester hours
   Not more than 6 semester hours may be in any one field; at least one course must involve laboratory experience.

3. Group B (Social Science) . . . . 12 semester hours
   Not more than 6 semester hours may be in any one field; business administration courses may not be counted toward the completion of this requirement.

4. Group C-D (Language, literature or fine arts) . . 12 semester hours
   At least 6 semester hours must be in a foreign language, culture, or literature, and 2 semester hours in fine arts.

5. Major and Related Fields . . . . 42 semester hours
   Twenty-four hours must be in courses in the major subject area; the remaining 18 hours must lie in fields of study closely related to the major and approved by the major adviser. For completion of an acceptable major, grades in at least 33 of the 42 semester hours involved must be higher than "C–".

6. Free Electives . . . . 36 semester hours
   (In any courses acceptable toward the Bachelor of Science in General Studies degree.)

Total credit . . . . 120 semester hours

The Bachelor of Science Degree in Business Administration

A. COURSES IN GENERAL STUDIES (normally 52 semester hours)

1. English Composition and Literature (or equivalent) . . . . 6 semester hours

2. Group A (Science and Mathematics) . . . . . 12 semester hours
   Business Mathematics . . . . 6 semester hours
   Additional Course involving
   Laboratory Experience . . . 6 semester hours

3. Group B (Social Science) . . . . 24 semester hours
   Principles of Economics . . . 6 semester hours
   Money and Banking . . . . 3 semester hours
   Introduction to Government . 6 semester hours
   Additional courses to make up total of 24 semester hours. Business Administration courses may not be used.

4. Additional Courses in General Studies from Groups C and D (language, literature or fine arts) including a semester course in Public Speaking . . 10 semester hours

B. PROFESSIONAL COURSES (normally 68 semester hours)

1. Required Courses in Business Administration . . 36 semester hours
   Elements of Distribution (Marketing) . . . . 3 semester hours
   Elements of Production . . . 3 semester hours
   Principles of Accounting . . . 6 semester hours
   Business Statistics . . . . . . 6 semester hours
   Business Organization and Finance . . . . 6 semester hours
   Business Law . . . . 6 semester hours
   Analysis of Business Problems . 6 semester hours

2. Elective Courses in Business Administration, in one or more of the following fields . . . . 6 semester hours
   Accounting
   Economics
   Finance
   Management
   Marketing

C. FREE ELECTIVES (normally 26 semester hours)

Total credit . . . . 120 semester hours

General Degree Requirements

1. At least 30 semester hours, and usually the last 30 semester hours before graduation must be obtained at Clark University.
2. Quality standard:
   Courses with grades of D+, D, or D– may not be counted toward a bachelor's degree beyond one-quarter of the total credit required or, in the case of a transfer student, beyond one-quarter of the credit earned at Clark University.

3. Approval for candidacy:
   When a student has completed 30 semester hours at the Evening College (15 semester hours if the student presents 75–90 semester hours of transfer credits), he may apply, and be approved by the Director for candidacy for the degree.

REGISTRATION AND CLASSES

Registration for the fall term will be held in Jonas Clark Hall according to the following schedule:

September 12–16, Monday through Friday, 6:30 to 8:45 p.m.
September 17, Saturday, 9:00 to 12:00 m.
September 19, Monday, classes begin.

All students must register in person. Registration is not complete until tuition and fees have been paid in accordance with Evening College regulations.

The University reserves the right to withdraw courses for which the registration is less than 15.

LATE REGISTRATION—CHANGE OF SCHEDULE

Late registration will be permitted upon payment of the late registration fee *prior* to the *third* meeting of any class.

Changes of schedule may be made with permission of the Director *prior* to the *third* meeting of any class.

TUITION AND FEES

Tuition in the Evening College is charged at the rate of $17.00 per semester hour. Thus the tuition for a two semester hour course is $34.00 and the tuition for a three semester hour course is $51.00.

A matriculation fee of $5.00 is required of all students registering for credit courses in the University for the first time.

A late registration fee of $3.00 is charged for registration after the announced registration period.

A $3.00 fee is charged for each make-up examination.

A $1.00 fee is charged for the privilege of deferred tuition payment.

One copy of the student's record is furnished free of charge. There is a $1.00 fee for each additional transcript.

DEFERRED PAYMENT OF TUITION

Although all tuition and fees are due at the time of registration, students who find it convenient to defer payment of their tuition may do so in accordance with the schedule below:

During registration—25% of tuition plus all fees
At the end of the second week—25% of tuition
At the end of the fourth week—25% of tuition
At the end of the sixth week—25% of tuition

A $1.00 fee is charged for the privilege of deferment and a $1.00 charge will be made for late payment of any installment. Permission to defer payment in no way releases the student from obligation to complete payment, regardless of whether a course is completed, unless a refund is granted.

WITHDRAWAL AND REFUND OF TUITION

Because the Evening College makes its financial commitments on the basis of income at the time of registration, it is not possible to make full refunds in cases of withdrawal. Requests for withdrawal must be made *in writing* and will become effective upon receipt in the Evening College office. *Discontinuance of attendance or notice to the instructor does not constitute withdrawal.* Partial refunds will be made only under these circumstances and in accordance with the following schedule:

Withdrawal by the end of the second week—75%
Withdrawal by the end of the fourth week—50%
Withdrawal by the end of the sixth week—25%
After six weeks—no refund

AUDITORS

Persons not desiring academic credit are welcome to enroll in credit courses, and may participate in class discussions and projects to the extent of their interest. There is no reduction in tuition or fees for auditors. Under no circumstances may a student utilizing Veterans Administration educational benefits audit a course.

Change of status from credit to auditor or vice-versa will not be permitted beyond the eighth week of the term.

INFORMATION FOR VETERANS

All credit courses offered by the Evening College are approved for eligible veterans under P.L. 346 and P.L. 550. Current V.A. regulations require that a student be enrolled for a specific educational or professional objective, with the result that veterans planning to use benefits must enroll either in one of the degree programs, or arrange a program leading to a professional objective in consultation with a member of the staff.

Veterans commencing a program in September should make application for benefits immediately at their local V.A. office. P.L. 346 veterans who do not present a certificate of eligibility during the registration period are considered to be cash students until such time as the certificate is received. Veterans under P.L. 550 must meet all financial obligations to the University, and are reimbursed by the Veterans Administration on a monthly basis.

FINAL GRADES—GRADING SYMBOLS

A final examination is given at the conclusion of all credit courses, and final grades, based upon term work, tests and the examination are mailed to each student as soon as possible after the end of the term. Symbols used are explained below:

A—Excellent.
B—Good.
C—Fair.
D—Poor.
F—Failure.
W—Official withdrawal. Awarded only when the student gives written notice of his intention to withdraw.
T—Term work incomplete. If credit is desired, required work must be made up within six months from the end of the term.
X—Examination not taken. If credit is desired a make-up examination must be taken within six weeks from the end of the term. The instructor may award an F in lieu of an X where it seems appropriate.
TX—Term work incomplete, examination not taken.
AUD—Auditor.

Course Offerings

Language, Literature, and Cultural Studies

ARMENIAN

ARMENIAN LANGUAGE AR.—E.1–2

Armen Jerejian, Ph.D., *Visiting Professor from Columbia University*

A study of modern Armenian for beginners. One hour of language analysis and one of written and oral practice. Through the year.

Saturday, 9:00–10:50. 2 semester hours credit each term.

INTERMEDIATE ARMENIAN LANGUAGE AR.—E.3–4

Armen Jerejian, Ph.D., *Visiting Professor from Columbia University*

A review of essentials of grammar, reading of moderately difficult texts, and oral practice. Through the year. Prerequisite: Armenian 1–2 or equivalent.

Saturday, 11:00–12:50. 2 semester hours credit each term.

HISTORY AND CULTURE OF ARMENIA AND THE NEAR-EAST, MODERN TIMES AR.—E.117a, b

Armen Jerejian, Ph.D., *Visiting Professor from Columbia University*

A critical study of Armenia and Near-Eastern history and culture as revealed by modern documents in relation to the Armenian conquest of Cilicia, the Armenian kingdom of Cilicia, the crusades, the Church of Armenia and Greco-Latin relations, the Armenian, Mongol, Byzantine and Arab or Moslem relations, the Armenian trade between the East and West and its economical and cultural significance for Europe, the Armenian Renaissance and its influence on the European Renaissance, the Turkish and Persian rules, the dispersion of Armenians, the Armenians in Persia, India, Poland, Russia, Italy, France, etc.; the Armenian literature, liturgy, theology, troubadours, sciences, architecture, sculpture, arts, industries, trades, etc. Through the year.

Friday, 7:00–9:40. 3 semester hours credit each term.

ART

MASTERPIECES OF WORLD ART F.A.—E.19

Miss Charlotte Buel Johnson, A.M., *Instructor,*
School of Worcester Art Museum

Outstanding works of art in painting and the personalities who have produced them. Each work will be studied in relation to the significant social, economic, and religious developments of its period, together with significant contemporary sculptures and buildings. Paintings studied will include masterpieces from the very earliest times up to the present.

Thursday, 7:00–8:50. 2 semester hours credit.

COMPARATIVE LITERATURE

FAUST AND THE SEARCH FOR KNOWLEDGE C.L.—E.115

Karl J. R. Arndt, Ph.D., *Professor of German*

A study of man's restless search for knowledge, enlightenment, and spiritual peace as reflected in the treatment of the Faust theme from Martin Luther to Thomas Mann (16th to 20th centuries). The impact of this theme upon the literature, music, and art of the West and upon the character of the German people. Slides and recent LP recordings of various treatments of the theme in England, France, Italy, and Germany will be used, but the main part of the course will be devoted to Goethe's FAUST as the greatest literary development of the theme in world literature. GIVEN IN ENGLISH.

Monday, 7:00–9:40. 3 semester hours credit.

ENGLISH

ENGLISH COMPOSITION AND LITERATURE* EN.—E.11a, b

Edward H. Hastings, A.M., *Lecturer*
William H. Carter, Ph.D., *Assistant Professor of English*

Designed to teach the student how to acquire clarity and accuracy in his reading and writing, and to help him to develop sound critical standards in evaluating literature. The first semester reviews the principles of rhetoric, offers the student practice in analyzing expository essays, and takes up the short story as an art form. Emphasis on good writing is continued during the second semester, together with an introduction to poetry and the drama or the novel as types of literature. Through the year.

Wednesday, 7:00–9:40. 3 semester hours credit each term.

PUBLIC SPEAKING** EN.—E.12

Robert S. Illingworth, A.M., *Professor of Speech and Drama*

A course in the fundamentals of public speaking including the more common speech situations such as speech of introduction, address of welcome, expository and impromptu speeches; problems in human relations; voice tests, and vocabulary drill. (Enrollment limited to twenty.)

Monday, 7:00–9:40. 3 semester hours credit.

GREAT AMERICAN WRITERS OF THE NINETEENTH CENTURY EN.—E.14

Karl O. E. Anderson, Ph.D., *Associate Professor of English*

Beginning with Edgar Allan Poe, who in such tales as "The Murders in the Rue Morgue," founded the ever-popular detective stories and who, in such works as "The Fall of the House of Usher," "The Raven," and "Ulalume," brought the literature of wonder, mystery, and horror to a new high, the course will proceed to a study of Thoreau's *Walden*, Melville's *Moby Dick*, and Whitman's *Leaves of Grass* in order to see how these writers gave literary expression to the ideals of the American way of life—the belief in the value of the individual, the emphasis on brotherhood, the faith in progress, and the stress on tolerance and open-mindedness. The course will close with an analysis of Twain's *Huckleberry Finn*, the highest expression of the comic spirit in American literature, and with a study of Emily Dickinson, who reflected much of the best in the nineteenth century at the same time as she prepared the way for the poetry of our own day.

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*Required for the Bachelor of Science Degree.

**Required for the Bachelor of Science Degree in Business Administration.

Wednesday, 7:00–9:40. 3 semester hours credit.

NON-FICTION WRITING EN.—E.21

William E. Harris, A.B., *Lecturer*

Basic techniques and varying forms, such as news reporting, feature article and filler writing, columns, editorials and essays, trade paper writing, etc., will be discussed. The difference between local and national coverage, newspaper and magazine writing will be analyzed. Individual student aptitudes will be developed by the writing of approximately a dozen manuscripts and class-time discussion of these. Personal conferences will be arranged. Prerequisite: a full year in basic college English, or permission of the instructor.

Thursday, 7:00–9:40. 3 semester hours credit.

LITERATURE OF MODERN AMERICAN LIFE EN.—E.120

Edward H. Hastings, A.M., *Lecturer*

A study of the literature of television, motion pictures, radio, the press, magazines and "pulps" in terms of its worth as an expression of modern culture as well as its literary value. By comparative analysis with both recent and earlier masterpieces in such categories as the mystery story, the war story, science fiction, etc., an attempt will be made to increase the student's ability to distinguish good contemporary writing from the mass of ephemera which continues to pour from the presses. Writers to be discussed will include Mickey Spillane, Thomas Heggen, James Michener, Ellery Queen, Aldous Huxley, Conan Doyle and Shakespeare.

Monday, 7:00–9:40. 3 semester hours credit.

MUSIC

THE DEVELOPMENT OF THE SYMPHONY MU.—E.19

Edward H. Hastings, A.M., *Lecturer*

Designed primarily to help the student become a more intelligent listener to symphonic music by tracing the development of the symphony and symphonic forms from the time of Haydn to the present day. In addition to a detailed study of major works of Haydn, Mozart, Beethoven, Schubert, Brahms, Berlioz, Mahler, Sibelius and Shostakovitch, the course will study the development of the modern symphony orchestra and the chief elements of classicism and romanticism in music. While some ability to read music will be an advantage, it is not required.

Thursday, 7:00–9:40. 3 semester hours credit.

SPANISH

BEGINNING SPANISH SP.—E.11a, b

Raymond E. Barbera, Doctor en Letras,
Instructor in Romance Languages

Designed to provide a basic foundation for a good listening, speaking and reading knowledge of Spanish. It will be adapted to the needs of the class so that it may be helpful to business people and travelers as well as those wishing to pursue further study of the language. Through the year.

Thursday, 7:00–8:50. 2 semester hours credit each term.

INTERMEDIATE SPANISH SP.—E.12a

Miss Helen G. Agbay, A.M., *Lecturer*

A review of grammar exercises in composition and pronunciation. Reading of texts dealing primarily with Spanish America. Prerequisite: one year of college Spanish.

Tuesday, 7:00–8:50. 2 semester hours credit.

SWEDISH

BEGINNING SWEDISH SW.—E.11a, b

Mrs. Vanja Boklund, A.M., *Lecturer*

Designed to provide a basic foundation for a good listening, speaking and reading knowledge of Swedish. It will be adapted to the needs of the class so that it may be helpful to business people and travelers as well as those wishing to pursue further study of the language. Through the year.

Tuesday, 7:00–8:50. 2 semester hours credit each term.

Science and Mathematics

BIOLOGY

MAN AND THE ANIMAL WORLD BIO.—E.10

Rudolph F. Nunnemacher, Ph.D., *Professor of Biology*

A review of the tremendous variety of forms in the animal kingdom, their simple origins and gradual adaptations to life in the oceans, in fresh water, and on land. The structure and function of the human body is compared with that of other animal types to illustrate the basic problems of existence; the evolution of new organs and forms to meet the challenge of survival in an ever changing environment, and man's place in nature and his impact on the living world will be discussed. Laboratory demonstrations and films. *Satisfies the Science requirement for the Bachelor of Science degree if followed by a similar course in the physical sciences to be offered in the spring.*

Thursday, 7:00–9:40. 3 semester hours credit.

MATHEMATICS

See BUSINESS ADMINISTRATION, page 19.

PHYSICS

THE ATOMIC WORLD OF TODAY

Percy M. Roope, Ph.D., *Professor of Physics*

A series of lectures and demonstrations on atomic and nuclear physics designed for those who wish to obtain a basic knowledge of its principles and an appreciation of its applications. Natural radioactivity, methods and apparatus for detecting radiation, properties of radiations, artificial disintegration, induced radioactivity, neutrons and nuclear fission and fusion will be discussed.

The lectures will be primarily descriptive and explanatory, with quantitative effects handled graphically as far as possible. Although some previous knowledge of chemistry is desirable it is not essential. Ample opportunity will be provided for discussion of special subjects of interest.

The series should be of value to secondary school teachers, professional people whose work is not in this field but associated with it, civil defense personnel, and others who want to understand more about our atomic age.

Eight lectures. Tuesday, 7:30–9:00 p.m., beginning October 4.
Fee: $15.00 Non-credit.

Social Studies

ECONOMICS

PRINCIPLES OF ECONOMICS* EC.—E.111a, b

Roger C. Van Tassel, A.M., *Assistant Professor of Economics*

A study of the American economic system. The student needs no previous formal work in economics. He will examine and discuss basic facts and explanations and apply them to leading economic problems of the day. Typical subjects are: the nature of American Capitalism; the price system; money; credit and banking; depression and inflation; economic growth; income distribution; labor; public finance; international trade. Through the year.

Tuesday, 7:00–9:40. 3 semester hours credit each term.

MONEY AND BANKING* EC.—E.13

James A. Maxwell, Ph.D., *Professor of Economics*

The principles of money and banking; characteristics of the American monetary and banking system; theoretical relations of money, prices, income. Prerequisite: EC. 111a, b.

Monday, 7:00–9:40. 3 semester hours credit.

*Required for the Bachelor of Science Degree in Business Administration.

HISTORY

THE GROWTH OF WESTERN CIVILIZATION HIST.—E.14

Samuel M. Osgood, Ph.D., *Instructor in History, Brown University*

A survey of political, economic and intellectual trends from the Renaissance to the end of the Napoleonic Era, designed to promote an understanding of the origin and development of the modern world. Topics to be discussed include the Renaissance, and Reformation, the Commercial Revolution, the Growth of the Modern State, the Age of Enlightenment, and the Era of the French Revolution. Special emphasis will be placed upon European expansion in North America and early American History.

Thursday, 7:00–9:50. 3 semester hours credit.

POLITICAL HISTORY OF THE UNITED STATES* HIST.—E.131

Robert F. Campbell, Ph.D., *Associate Professor of American History*

A study of the historical development of the Presidency, Congress, the Supreme Court and the Party System since the adoption of the Constitution, together with an examination of the outstanding personalities and issues in American political life from Washington to Eisenhower. Lectures will be supplemented by individual reports and discussion.

Wednesday, 7:00–9:40. 3 semester hours credit.

PHILOSOPHY

GREAT PHILOSOPHERS OF THE PAST PHIL.—E.111

Richard H. Schlagel, Ph.D., *Instructor in Philosophy*

An introduction to philosophical thought. Ideas concerning value, virtue, justice, truth, the nature of man and the nature of reality, basic to the intellectual fabric of a civilization, are a legacy from great thinkers of the past. An understanding of the growth of these ideas fosters an appreciation of our own culture and its most pervasive concepts. Readings will be selected from the writings of Plato, Aristotle, St. Thomas Aquinas, Descartes, Berkeley and Hume.

Tuesday, 7:00–9:40. 3 semester hours credit.

PSYCHOLOGY

GENERAL PSYCHOLOGY PSY.—E.111

Seymour Wapner, Ph.D., *Associate Professor of Psychology*

An introduction to the principles of human behavior.

Monday, 7:00–9:40. 3 semester hours credit.

*Required for the Bachelor of Science Degree in Business Administration.

THE ADOLESCENT PSY.—E.175

Theodore Leventhal, Ph.D., *Assistant Professor (Affiliate) in Psychology*
Chief Psychologist, Child Guidance Center

The personality development of adolescents, including their needs, ways of thinking and behaving, and the problems they face. Some representative adolescent difficulties, as in delinquency, will be discussed.

Tuesday, 7:00–8:50. 2 semester hours credit.

SOCIAL PSYCHOLOGY PSY.—E.200

Richard S. Lazarus, Ph.D., *Associate Professor of Psychology*

A study of the ways in which individuals are moulded to become members of different groups. The course details how the infant and child acquire the attitudes, interests, beliefs, values and motives of such groups as the family, church, nation, etc. It also deals with the psychological processes underlying such important social phenomena as group conflict, the emergence of leadership, the transmission of rumor, the effectiveness of propaganda, panic and hysteria of groups, group violence, war. Prerequisite: an introductory course in psychology, or permission of the instructor.

Thursday, 7:00–9:40. 3 semester hours credit.

SOCIOLOGY

PEOPLES OF THE WORLD SOC.—E.12

Albert Morris, Ph.D., *Chairman, Department of Sociology and*
Anthropology, Boston University

An introductory course in cultural anthropology designed to acquaint students comparatively with a selection of peoples and cultures different from our own as an aid to objective analysis of contemporary society and as a basis for useful generalizations about human social behavior. A foundation course for advanced work in Sociology.

Monday, 7:00–9:40. 3 semester hours credit.

SOCIAL INSTITUTIONS IN AMERICAN LIFE SOC.—E.25

Frederick W. Killian, LL.B., *Associate Professor of Sociology*

A study of important social institutions in America; their development and interrelations; their theoretical basis; their structure and function. Major emphasis will be upon (a) the family and kinship systems in Western Civilization; change, and the modern family in an urban-industrial society; recent trends in marriage and the family; and (b) the religious tradition in Western Civilization and its institutional forms. The function of religion in the modern, urban world. Some trends in religious development.

Tuesday, 7:00–9:40. 3 semester hours credit.

Business Administration

ACCOUNTING

PRINCIPLES OF ACCOUNTING* B.A.—E.117a, b

The organization and use of financial records, with emphasis on their interpretation as well as on the techniques of procedure.

Wednesday, 7:00–9:40. 3 semester hours credit each term.

117a George E. Hargest, M.B.A., *Associate Professor of Economics and Business Administration*
Jason E. Newton, A.M., *Lecturer*

117b (Open to students who have completed one semester of accounting.)
Charles L. Sanders, M.B.A., *Lecturer*

INTERMEDIATE ACCOUNTING B.A.—E.127a, b

Robert J. Hurwitz, C.P.A., *Lecturer*

A study of generally accepted accounting principles and procedures and their application to asset, liability and proprietorship accounts. The analysis of financial statements, including statements from incomplete data and the statement of application of funds. Emphasis is placed upon problem analysis and solution. Through the year. Prerequisite: B.A.—E.117a, b.

Wednesday, 7:00–9:40. 3 semester hours credit each term.

FEDERAL TAX ACCOUNTING B.A.—E.129

Robert J. Hurwitz, C.P.A., *Lecturer*

A basic course in the fundamentals of federal income and social security taxes with major emphasis upon the preparation of returns. Prerequisite: a prior accounting course.

Monday, 7:00–9:40. 3 semester hours credit.

MANAGEMENT

ELEMENTS OF PRODUCTION* B.A.—E.10

Rudolph A. Johnson, B.B.A., *Lecturer*

An introductory course which provides a survey of the production function in business, giving special emphasis to an exposition and theoretical evaluation of current practices in the fields of plant location, building and equipment selection, product and process development, maintenance, and methods of manufacture.

Thursday, 7:00–9:40. 3 semester hours credit.

*Required for the Bachelor of Science Degree in Business Administration.

BUSINESS ORGANIZATION AND FINANCE* B.A.—E.18a, b

James M. Hund, Ph.D., *Assistant Professor of Economics and Sociology*

A course in the financial structure of modern industry with emphasis on the nature of the business corporation, its financial practices, types of securities, capital structure, financial reorganization, and the problems of internal financial control. Through the year. Prerequisite: EC.—E.111 a, b.

Tuesday, 7:00–9:40. 3 semester hours credit each term.

INTRODUCTION TO PERSONNEL MANAGEMENT B.A.—E.112

Samuel J. Lukens, Ph.D., *Lecturer*

An analysis of the managerial functions, procedures and relationships involved in handling the human problems of business. Attention will be given to such basic tasks as the interviewing, testing and selection of applicants, employee and executive training, job evaluation, performance rating, dealing with grievances, and developing morale. Cases will be drawn from industry, the distributive fields, and office work.

Thursday, 7:00–9:40. 3 semester hours credit.

WORK SIMPLIFICATION B.A.—E.113

Joseph A. Nordstrom, M.S., *Assistant Professor of Business Administration*

A study of the techniques used in the simplification and standardization of manual labor, with particular emphasis on the human relations problems involved. This is a "person-centered" approach to motion analysis. Process flow analysis, man-machine chart analysis, operator chart analysis, and micro-motion analysis will be covered both in lecture and demonstration form and in laboratory practice.

Monday, 7:00–9:40. 3 semester hours credit.

MANAGEMENT OF SMALL BUSINESS B.A.—E.170

Everett P. Webster, M.B.A., *Lecturer*

An examination of the problems faced by management in the organization and operation of a small manufacturing or service enterprise, with emphasis on desirable forms of organization, financing a new business, initial operation, personnel selection and training, human relations in small industry, analysis and evaluation of old and new markets, procurement, production control, methods, cost control and pricing, and governmental regulations and assistance. The case study method will be employed. Lectures will be supplemented by guest speakers and discussions.

Monday, 7:00–9:40. 3 semester hours credit.

MARKETING

SALESMANSHIP B.A.—E.23

Warren K. Heckman, A.M., *Lecturer*

An examination of the basic principles and theory of salesmanship, with emphasis upon everyday sales problems. Sales techniques will be taught by case studies, sales demonstrations and discussions in which all students will participate. Guest speakers will provide illustrations of ways in which various companies meet practical sales problems.

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*Required for the Bachelor of Science Degree in Business Administration.

Tuesday, 7:00–9:40. 3 semester hours credit.

MATHEMATICS

ELEMENTARY ALGEBRA* B.A.—E.9

John S. Stubbe, Ph.D., *Associate Professor of Mathematics*

A logical, intensive study of the foundations of elementary algebra, including the development of techniques necessary for the study of mathematical methods in finance and investment.

Monday, 7:00–9:40. 3 semester hours credit.

INSURANCE

PRINCIPLES OF LIFE AND DISABILITY INSURANCE INS.—E.15

Robert F. Green, M.B.A., C.L.U., *Lecturer*

An intensive study of basic principles, practices, functions and legal phases of life, accident and sickness insurance, including personal estate planning, business life insurance, medical insurance, group, pensions, trusts, and taxes affecting insurance.

Wednesday, 7:00–8:50. 2 semester hours credit.

Chartered Life Underwriter Insurance Courses

ROBERT F. GREEN, M.B.A., C.L.U., *Coordinator*

In cooperation with the Worcester Life Underwriters Association and the American College of Life Underwriters, the Evening College inaugurates this year a program of C.L.U. courses designed as preparation for the national examinations given early in June each year on the Clark campus.

During the coming year Part C, as indicated below, will be offered. Enrollment permitting, all five parts of the C.L.U. course series will be offered within the next five years, enabling central Massachusetts life underwriters to complete all of their preparation for the coveted C.L.U. designation in Worcester. The courses carry no academic credit.

Information regarding the eligibility, examination and experience requirements established by the American College of Life Underwriters will be found in the current announcement of the College. Copies are available in the Evening College office.

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*Required for the Bachelor of Science Degree. Students who achieve satisfactory scores on a placement examination may substitute three semester hours in General Studies. Mathematics of Finance, to be offered in the spring term, is required of all students as a prerequisite for Business Statistics.

LAW, TRUSTS, AND TAXES C.L.U., Part C

Instructor to be announced

General commercial law, including law of life insurance; wills, trusts, and estates; taxation and business insurance for laymen engaged in life insurance underwriting. Through the year.

Wednesday, 4:00–5:50. Non-credit. $34.00 each term.

Nursing Education

In cooperation with the Evening College, the Boston University School of Nursing offers selected courses in nursing education on the Clark University campus during the late afternoon on an extramural basis. Designed as a service to graduate nurses in Central Massachusetts, they afford an opportunity for progress toward the Bachelor of Science degree at the School of Nursing. Offerings are determined by the School in consultation with an advisory committee representing local hospitals and public health agencies.

In addition, many of the liberal arts courses offered by the Evening College may be transferred to the School of Nursing in satisfaction of general education requirements for the degree, with the result that considerably more than half of the program may be completed in Worcester. Further information regarding degree requirements may be obtained from the Director.

Students working for the degree are urged to apply for matriculation at the School of Nursing immediately upon commencement of their studies.

NURSING IN THE SOCIAL ORDER NU–203X

Miss Martha R. Smith, A.M., *Professor,*
Boston University School of Nursing

Designed to orient the student to the modern philosophy of nursing and the concepts of nursing education upon which the School's programs are built. The relationship of nursing to the social order is studied in the light of historical development, factors in the social structure affecting nursing, and the evolving professional demands.

Wednesday, 4:30–6:30. 2 semester hours credit. Tuition: $40.00.

WARD TEACHING NU—400X

Miss Myrtle M. Ford, M.S., *Associate Professor,*
Boston University School of Nursing

Designed both for staff nurse and head nurse. This course considers the principles and methods of teaching as they relate to teaching patients and students in the clinical field. Primary emphasis is placed on the objectives and organizations of ward teaching programs.

Thursday, 4:30–6:30. 2 semester hours credit. Tuition: $40.00.

Course Schedule

Number	*Course*	*Credit*	*Instructor*
MONDAY			
B.A. —E.9	Elementary Algebra	3	John Stubbe
B.A. —E.113	Work Simplification	3	Joseph Nordstrom
B.A. —E.129	Federal Tax Accounting	3	Robert J. Hurwitz
B.A. —E.170	Management of Small Business	3	Everett P. Webster
C.L. —E.115	Faust and the Search for Knowledge	3	Karl J. R. Arndt
EC. —E.13	Money and Banking	3	James A. Maxwell
EN. —E.12	Public Speaking	3	Robert S. Illingworth
EN. —E.120	Literature of Modern American Life	3	Edward H. Hastings
PSY. —E.111	General Psychology	3	Seymour Wapner
SOC. —E.12	Peoples of the World	3	Albert Morris
TUESDAY			
B.A. —E.18a, b	Business Organization and Finance	3	James M. Hund
B.A. —E.23	Salesmanship	3	Warren K. Heckman
EC. —E.111a, b	Principles of Economics	3	Roger C. Van Tassel
PHIL.—E.111	Great Philosophers of the Past	3	Richard H. Schlagel
PSY. —E.175	The Adolescent	2	Theodore Leventhal
SOC. —E.25	Social Institutions in American Life	3	Frederick W. Killian
SP. —E.12a	Intermediate Spanish	2	Miss Helen G. Agbay
SW. —E.11a, b	Beginning Swedish	2	Mrs. Vanja Boklund
	The Atomic World of Today. Non-Credit		Percy M. Roope
WEDNESDAY			
B.A. —E.117a	Principles of Accounting	3	George E. Hargest
b		3	Charles L. Sanders
B.A. —E.127a, b	Intermediate Accounting	3	Robert J. Hurwitz
EN. —E.14	Great American Writers of the Nineteenth Century	3	Karl O. E. Anderson
EN. —E.111a, b	English Composition and Literature	3	Edward H. Hastings
HIST.—E.131	Political History of the U.S.	3	Robert F. Campbell
INS. —E.15	Principles of Life and Disability Insurance	2	Robert F. Green
NU. —203X	Nursing in the Social Order	2	Miss Martha R. Smith
CLU —Part C	Law, Trust and Taxes. Non-credit		To be announced
THURSDAY			
B.A. —E.10	Elements of Production	3	Rudolph A. Johnson
BIO. —E.10	Man and the Animal World	3	Rudolph Nunnemacher
B.A. —E.112	Introduction to Personnel Management	3	Samuel J. Lukens
EN. —E.21	Non-Fiction Writing	3	William E. Harris
F.A. —E.19	Masterpieces of World Art	2	Miss Charlotte B. Johnson
HIST.—E.14	The Growth of Western Civilization	3	Samuel Osgood
MU. —E.19	The Development of the Symphony	3	Edward H. Hastings
NU. —400X	Ward Teaching	2	Miss Myrtle M. Ford
PSY. —E.200	Social Psychology	3	Richard S. Lazarus
SP. —E.11a, b	Beginning Spanish	2	Raymond E. Barbera
FRIDAY			
AR. —E.117a, b	History and Culture of Armenia	3	Armen Jerejian
SATURDAY			
AR. —E.1–2	Armenian Language	2	Armen Jerejian
AR. —E.3–4	Intermediate Armenian	2	Armen Jerejian

CLARK UNIVERSITY
FIAT LUX
MDCCCLXXXVII

Education for Adults

THE EVENING COLLEGE

CLARK UNIVERSITY

SPRING 1956

Calendar

January 23–27, Monday through Friday—Registration, 6:30 to 8:45 p.m.

January 28, Saturday—Registration, 9:00 to 12:00 m.

January 30, Monday—Spring term classes begin. Late registration commences.

February 9, Thursday—Second tuition installment due.

February 16, Thursday—Last date for late registration.

February 22, Wednesday—Washington's Birthday, classes suspended.

February 23, Thursday—Third tuition installment due.

March 8, Thursday—Final tuition installment due.

March 22, Thursday—Last date for change in auditor or credit status.

March 29, Thursday—Spring recess commences at close of classes.

April 9, Monday—Spring recess ends, classes resume.

May 21–31—Final examinations.

May 30, Wednesday—Memorial Day. A holiday.

June 3, Sunday—Commencement Day.

MDCCCLXXXVII

Education for Adults

Spring Term, 1956

**THE EVENING COLLEGE
OF CLARK UNIVERSITY**

Main Street, Worcester 10, Massachusetts

TELEPHONE PL 6-1525

The Evening College of Clark University

OFFICERS OF ADMINISTRATION

Howard B. Jefferson, President of the University
Robert M. Hyde, Director, the Evening College

THE EVENING COLLEGE BOARD

Robert F. Campbell
H. Donaldson Jordan
Eugene J. Kelley
Joseph A. Nordstrom
Percy M. Roope
Seymour Wapner

General Information

The Evening College, established in 1953 as an institution devoted to adult learning, has three primary functions. With the conviction that education in our modern society must be a lifelong process, it provides university education for adults of all ages who seek further knowledge and personal development through selected studies in the broad areas of the liberal arts. Further, in recognition of the rapidly developing and changing needs of business and the professions, it provides courses designed to help working men and women improve their occupational skills and to prepare for positions of increased responsibility.

Secondly, the Evening College provides an opportunity for adults to earn the bachelor's degree, exclusively by evening study, through programs planned to meet the unique educational needs of the mature person. Formal programs are available leading to the Bachelor of Science degree in either General Studies or Business Administration. In June, 1956 the Evening College will graduate its first class of degree candidates.

Finally, as a community service, the Evening College organizes frequent non-credit short courses, institutes and seminars tailored to the specific needs of various civic, professional and business groups. Information regarding such services should be addressed to the Director.

ADMISSION

In general, admission to the Evening College is open to all interested adults seeking to further their education. High school graduation, though not required, is desirable. Continued attendance is contingent upon evidence of ability to profit from the instruction offered. Admission to candidacy for a degree will be granted only upon satisfactory completion of a minimum of 15 and a maximum of 30 semester hours credit.

EDUCATIONAL COUNSELLING

Adults seeking information and assistance regarding their educational plans are welcome to consult a member of the Evening College staff at any time. The Evening College office is open daily, from 9:00 until 4:30 p.m., throughout the year, and from 6:30 until 8:30 p.m. Monday through Thursday during the winter and spring semesters.

During January the Evening College office will be open evenings for student consultation according to the following schedule:

Through January 19—6:30 to 8:30 p.m., Monday through Thursday.

January 23–27—6:30 to 8:30 p.m., Monday through Friday.

Commencing January 30—6:30–8:30 p.m., Monday through Thursday.

Students working for a degree are urged to consult a member of the staff regarding their program prior to or during each registration period.

THE BACHELOR OF SCIENCE DEGREE

The Evening College awards the Bachelor of Science degree in General Studies or Business Administration upon successful completion of a prescribed program of 120 semester hours credit. Approximately one-third of the credits are earned in the field of major interest, another third in the liberal arts courses not a part of the major, while the remaining third are chosen as free electives. The average length of time required for completion of the program is eight years. Credits transferred from other institutions may substantially reduce the credits to be earned at Clark.

Adults who plan to enroll for a program of studies leading to either degree are urged to consult a member of the Evening College staff as far as possible in advance of the semester in which they plan to register. Official transcripts of work completed at other institutions should be forwarded at the request of the applicant directly to the Evening College, 950 Main Street, Worcester 10, Massachusetts.

DEGREE PROGRAMS

The Bachelor of Science Degree in General Studies

1. English Composition and Literature . . . . . . 6 semester hours

2. Group A (Science and/or Mathematics) . . . . . 12 semester hours
Not more than 6 semester hours may be in any one field; at least one course must involve laboratory experience.

3. Group B (Social Science) . . . . 12 semester hours
Not more than 6 semester hours may be in any one field; business administration courses may not be counted toward the completion of this requirement.

4. Group C-D (Language, literature or fine arts) . . 12 semester hours
At least 6 semester hours must be in a foreign language, culture, or literature, and 2 semester hours in fine arts.

5. Major and Related Fields . . . . 42 semester hours
Twenty-four hours must be in courses in the major subject area; the remaining 18 hours must lie in fields of study closely related to the major and approved by the major adviser. For completion of an acceptable major, grades in at least 33 of the 42 semester hours involved must be higher than "C–".

6. Free Electives . . . . 36 semester hours
(In any courses acceptable toward the Bachelor of Science in General Studies degree.)

Total credit . . . . 120 semester hours

The Bachelor of Science Degree in Business Administration

A. COURSES IN GENERAL STUDIES (normally 52 semester hours)

1. English Composition and Literature (or equivalent) . . . . 6 semester hours

2. Group A (Science and Mathematics) . . . . . 12 semester hours
Business Mathematics . . . . 6 semester hours
Additional Course involving
Laboratory Experience . . . 6 semester hours

3. Group B (Social Science) . . . . 24 semester hours
   Principles of Economics . . . 6 semester hours
   Money and Banking . . . . 3 semester hours
   Introduction to Government . 6 semester hours
   Additional courses to make up total of 24 semester hours. Business Administration courses may not be used.

4. Additional Courses in General Studies from Groups C and D (language, literature or fine arts) including a semester course in Public Speaking . . 10 semester hours

B. PROFESSIONAL COURSES (normally 68 semester hours)

1. Required Courses in Business Administration . . 36 semester hours
   Elements of Distribution (Marketing) . . . . 3 semester hours
   Elements of Production . . . 3 semester hours
   Principles of Accounting . . . 6 semester hours
   Business Statistics . . . . . . 6 semester hours
   Business Organization and Finance . . . . 6 semester hours
   Business Law . . . . 6 semester hours
   Analysis of Business Problems . 6 semester hours

2. Elective Courses in Business Administration, in one or more of the following fields . . . . 6 semester hours
   Accounting
   Economics
   Finance
   Management
   Marketing

C. FREE ELECTIVES (normally 26 semester hours)

Total credit . . . . 120 semester hours

General Degree Requirements

1. At least 30 semester hours, and usually the last 30 semester hours before graduation must be obtained at Clark University.

2. Quality standard:
   Courses with grades of D+, D, or D− may not be counted toward a bachelor's degree beyond one-quarter of the total credit required or, in the case of a transfer student, beyond one-quarter of the credit earned at Clark University.

3. Approval for candidacy:
   When a student has completed 30 semester hours at the Evening College (15 semester hours if the student presents 75–90 semester hours of transfer credits), he may apply, and be approved by the Director for candidacy for the degree.

REGISTRATION AND CLASSES

Registration for the spring term will be held in Jonas Clark Hall according to the following schedule:

January 23–27, Monday through Friday, 6:30 to 8:45 p.m.
January 28, Saturday, 9:00 to 12:00 m.
January 30, Monday, classes begin.

All students must register in person. Registration is not complete until tuition and fees have been paid in accordance with Evening College regulations.

The University reserves the right to withdraw courses for which the registration is less than 15.

LATE REGISTRATION—CHANGE OF SCHEDULE

Late registration will be permitted upon payment of the late registration fee *prior* to the *third* meeting of any class.

Changes of schedule may be made with permission of the Director *prior* to the *third* meeting of any class.

TUITION AND FEES

Tuition in the Evening College is charged at the rate of $17.00 per semester hour. Thus the tuition for a two semester hour course is $34.00 and the tuition for a three semester hour course is $51.00.

A matriculation fee of $5.00 is required of all students registering for credit courses in the University for the first time.

A late registration fee of $3.00 is charged for registration after the announced registration period.

A $3.00 fee is charged for each make-up examination.

A $1.00 fee is charged for the privilege of deferred tuition payment.

One copy of the student's record is furnished free of charge. There is a $1.00 fee for each additional transcript.

DEFERRED PAYMENT OF TUITION

Although all tuition and fees are due at the time of registration, students who find it convenient to defer payment of their tuition may do so in accordance with the schedule below:

During registration—25% of tuition plus all fees
At the end of the second week—25% of tuition
At the end of the fourth week—25% of tuition
At the end of the sixth week—25% of tuition

A $1.00 fee is charged for the privilege of deferment and a $1.00 charge will be made for late payment of any installment. Permission to defer payment in no way releases the student from obligation to complete payment, regardless of whether a course is completed, unless a refund is granted.

WITHDRAWAL AND REFUND OF TUITION

Because the Evening College makes its financial commitments on the basis of income at the time of registration, it is not possible to make full refunds in cases of withdrawal. Requests for withdrawal must be made *in writing* and will become effective upon receipt in the Evening College office. *Discontinuance of attendance or notice to the instructor does not constitute withdrawal.* Partial refunds will be made only under these circumstances and in accordance with the following schedule:

Withdrawal by the end of the second week—75%
Withdrawal by the end of the fourth week—50%
Withdrawal by the end of the sixth week—25%
After six weeks—no refund

AUDITORS

Persons not desiring academic credit are welcome to enroll in credit courses, and may participate in class discussions and projects to the extent of their interest. There is no reduction in tuition or fees for auditors. Under no circumstances may a student utilizing Veterans Administration educational benefits audit a course.

Change of status from credit to auditor or vice-versa will not be permitted beyond the eighth week of the term.

INFORMATION FOR VETERANS

All credit courses offered by the Evening College are approved for eligible veterans under P.L. 346 and P.L. 550. Current V.A. regulations require that a student be enrolled for a specific educational or professional objective, with the result that veterans planning to use benefits must enroll either in one of the degree programs, or arrange a program leading to a professional objective in consultation with a member of the staff.

Veterans commencing a program in January should make application for benefits immediately at their local V.A. office. P.L. 346 veterans who do not present a certificate of eligibility during the registration period are considered to be cash students until such time as the certificate is received. Veterans under P.L. 550 must meet all financial obligations to the University, and are reimbursed by the Veterans Administration on a monthly basis.

FINAL GRADES—GRADING SYMBOLS

A final examination is given at the conclusion of all credit courses, and final grades, based upon term work, tests and the examination are mailed to each student as soon as possible after the end of the term. Symbols used are explained below:

A—Excellent.
B—Good.
C—Fair.
D—Poor.
F—Failure.
W—Official withdrawal. Awarded only when the student gives written notice of his intention to withdraw.
T—Term work incomplete. If credit is desired, required work must be made up within six months from the end of the term.
X—Examination not taken. If credit is desired a make-up examination must be taken within six weeks from the end of the term. The instructor may award an F in lieu of an X where it seems appropriate.
TX—Term work incomplete, examination not taken.
AUD—Auditor.

Course Offerings

Language, Literature and Cultural Studies

ART

GREAT AMERICAN ARTISTS F.A.—E.20

Miss Charlotte B. Johnson, A.M., *Instructor,*
School of Worcester Art Museum

A study of the painters, sculptors and architects who have made and are making art in American life from the 18th century to the present. The class will meet in the American Gallery of the Worcester Art Museum, and pertinent objects in the Museum's collection will be used as examples of types and periods of art discussed. Slides will be used extensively to illustrate subjects under consideration.

Tuesday, 7:00–8:50. 2 semester hours credit.

ADVENTURES IN CREATIVE ART FOR EVERYONE

John H. Fulgoni, B.F.A., *Lecturer*

Everyone has the ability to draw and paint; in recent years many thousands of busy men and women have discovered in this stimulating pastime both pleasure and relaxation. This special course is designed to provide training and experience which will open a whole new world of exciting creative activity for the person with too much work and the person with too much leisure time. The course is intended for adults who are laymen in the field of art. It is for beginners, without special talent, and is not intended for persons with a professional interest in the subject.

Class sessions will be devoted to adventure with line, form, color, texture and space experiments, and definite art projects in water color, drawing, finger painting and paper mache. Freedom will be given to the creative desire through the use of creative stimulations designed to arouse the emotions and release in every person the ability to draw and paint. All art equipment and supplies will be provided without charge.

Tuesdays for 16 weeks, beginning January 31, 7:30–9:30.

Fee: $35.00 Non-credit.

ADVANCED CREATIVE ART TECHNIQUES

John H. Fulgoni, B.F.A., *Lecturer*

An advanced course in creative art covering oil painting, sketching in charcoal, carving, cartooning, and water color. Conducted on a laboratory basis, with participants organized into small groups to allow work on art techniques fitted to the individual's interest. Emphasis will be upon the individual and his desire for creative expression through exploration of advanced techniques. All art equipment and supplies will be provided without charge. *Class limited to twenty persons. Open only to students who have taken Adventures in Creative Art for Everyone.*

Mondays for 16 weeks, beginning January 30, 7:30–9:30.

Fee: $37.00 Non-credit.

COMPARATIVE LITERATURE

THE GERMAN CONTRIBUTION TO WORLD LITERATURE C.L.—E.116

Karl J. R. Arndt, Ph.D., *Professor of German*

The pressures and stresses resulting from two world-wide conflicts have tended to obscure the contribution made to world literature by the various German cultural areas. This course will seek to regain these lost horizons by beginning with a study of the term "World Literature" as first coined and used by Goethe. In keeping with his use of the term, representative works of world literature which originated in German language areas will then be studied. Recent L/P recordings will be used to illustrate the inspirational effect of such literature on such composers as Bach, Beethoven, Schubert, Wolf, and Wagner. Given in English.

Monday, 7:00–9:40. 3 semester hours credit.

ENGLISH

ENGLISH COMPOSITION AND LITERATURE* EN—E.11b

Section I—Edward H. Hastings, A.M., *Lecturer*
Section II—William H. Carter, Ph.D., *Associate Professor of English*

Designed to help the student to develop clarity and accuracy in his reading and writing, and to develop sound critical standards in evaluating literature. The second semester continues the emphasis on rhetoric, and includes the study of two novels, two plays, and an anthology of poetry. Prerequisite: EN.—E.11a or the equivalent.

Wednesday, 7:00–9:40. 3 semester hours credit.

PUBLIC SPEAKING** EN.—E.12

Robert S. Illingworth, A.M., *Professor of Speech and Drama*

A course in the fundamentals of public speaking including the more common speech situations such as speech of introduction, address of welcome, expository and impromptu speeches; problems in human relations; voice tests, and vocabulary drill. (Enrollment limited to twenty.)

Tuesday, 7:00–9:40. 3 semester hours credit.

FICTION WRITING EN.—E.22

William E. Harris, A.B., *Lecturer*

Fundamental techniques and craftsmanship. Discussion of different forms and lengths. Magazine and literary fiction; juvenile, historical, science fiction, etc. Character sketches, short story, longer forms. Emphasis on development of individual aptitudes through production of about six stories of varying length, and group discussion of manuscripts submitted. Personal conferences will be arranged. Prerequisite: A full year course in basic college English, or permission of the instructor.

Thursday, 7:00–9:40. 3 semester hours credit.

*Required for the Bachelor of Science Degree.

**Required for the Bachelor of Science Degree in Business Administration.

MODERN LITERATURE EN.—E.123

Edward H. Hastings, A.M., *Lecturer*

An introduction to some of the chief trends in twentieth century literature through the study of representative poets (Hopkins, Yeats, Eliot, Auden), novelists (Joyce, Hemingway, Orwell), and playwrights (Shaw and Miller).

Monday, 7:00–9:40. 3 semester hours credit.

WRITERS' WORKSHOP FOR FILM AND TV

Edward R. Knowlton, A.B., *Lecturer*

A workshop designed to teach basic techniques in preparing craftsmanlike scripts for film and television. In a small group the advanced amateur will be afforded an opportunity to learn by practical experience the essential writing elements which lie behind successful film and television presentations. Emphasis will be upon the challenges presented to the writer by these specialized media.

Major attention will be devoted to the problems of developing a story treatment from an idea; creating film scenes and sequences that hang together; writing overall scenarios and shooting scripts.

Workshop sessions will include comparative studies of successful dramatic, commercial and instructional films and TV kinescopes. Guest experts will speak on selected topics.

ADMISSION: Workshop participants will be selected on the basis of a typed manuscript of an original short story, play or other work indicating creative ability and basic skill in writing. Manuscripts may be mailed or delivered to the Evening College of Clark University, 950 Main Street, Worcester 10, Massachusetts *no later than February 15.* Applicants will be notified of their eligibility by February 22. Manuscripts to be returned by mail must be accompanied by a self-addressed stamped envelope.

Eight 3 hour sessions Mondays, beginning March 5. Non-credit.
Fee: $50.00 Special announcement will be mailed upon request.

MUSIC

THE MUSIC OF BEETHOVEN MU.—E.126

Edward H. Hastings, A.M., *Lecturer*

The music of Beethoven not only reflects more clearly than any other the gradual transition from the classic art of the eighteenth century to the romanticism of the nineteenth, but also foreshadows important musical developments of our own time. Through the study of representative works, this course will trace the development of the composer's style and philosophy of art. Symphonies 1, 3, 5 and 9, the opera *Fidelio*, the Fourth Piano Concerto, the incidental music to *Egmont*, and the *Pathetique* and *Apassionata Sonatas* will be studied as well as examples of Beethoven's songs and chamber music. While some ability to read music will be an advantage, it is not required.

Thursday, 7:00–9:40. 3 semester hours credit.

SPANISH

BEGINNING SPANISH SP.—E.11b

Raymond E. Barbera, Doctor en Letras,
Assistant Professor of Romance Languages

Designed to provide a basic foundation for a good listening, speaking and reading knowledge of Spanish. It will be adapted to the needs of the class so that it may be helpful to business people and travelers as well as those wishing to pursue further study of the language. Prerequisite: SP.—E.11a.

Thursday, 7:00–8:50. 2 semester hours credit.

SWEDISH

BEGINNING SWEDISH SW.—E.11b

Mrs. Vanja Boklund, A.M., *Lecturer*

Designed to provide a basic foundation for a good listening, speaking and reading knowledge of Swedish. It will be adapted to the needs of the class so that it may be helpful to business people and travelers as well as those wishing to pursue further study of the language. Prerequisite: SW.—E.11a or permission of the instructor.

Tuesday, 7:00–8:50. 2 semester hours credit.

Science and Mathematics

BIOLOGY

HUMAN ANATOMY AND PHYSIOLOGY B10.—E.19

Rudolph F. Nunnemacher, Ph.D., *Professor of Biology*

A detailed review of the structure, performance, and interrelation of the organ systems of the body. Laboratory exercises with preserved and living material will give emphasis to the form and function of the living body.

Lecture Thursday, 7:00–9:40. 4 semester hours credit.
Laboratory Monday, 7:00–9:40. Laboratory Fee: $5.00.

PHYSICS

INTRODUCTION TO PHYSICAL SCIENCE PHYS.—E.10

Percy M. Roope, Ph.D., *Professor of Physics*

Designed to provide a comprehensive and integrated view of the fundamental and outstanding developments of physical science from the time of Galileo to the present. Considerable attention is given to the methods and procedures of science, historical background, and the effect of science on man's thought and life. The subject matter covered is highly selected rather than encyclopaedic. Numerous laboratory demonstrations. *Satisfies the science requirement for the Bachelor of Science degree when followed by a similar course in the biological sciences.*

Thursday, 7:00–9:40. 3 semester hours credit.

MATHEMATICS

See BUSINESS ADMINISTRATION, page 18.

Social Studies

PRINCIPLES OF ECONOMICS* EC.—111b

Roger C. Van Tassel, A.M., *Assistant Professor of Economics*

A study of the American Economic system. The student needs no previous formal work in economics. He will examine and discuss basic facts and explanations and apply them to leading economic problems of the day. Typical subjects are: the nature of American Capitalism; the price system; money; credit and banking; depression and inflation; economic growth; income distribution; labor; public finance; international trade. Prerequisite: EC.—E.111a.

Tuesday, 7:00–9:40. 3 semester hours credit.

CONSUMER ECONOMICS EC.—E.210

F. Eugene Melder, Ph.D., *Associate Professor of Economics*

An examination of the role of the consumer in a market economy directed by "freedom of choice," including study of the social aspects of consumer decisions and demand manipulation. Attention will be devoted to analysis of such major areas of consumer decisions as housing, health, insurance, non-durable and durable goods, and to the problems of present versus future consumption. The question of appropriate measures for protection of the consumer will be examined, and suggestions for maximizing consumer-household satisfaction will be entertained. A prior course in economics is recommended.

Monday, 7:00–8:50. 2 semester hours credit.

HISTORY

PROBLEMS OF THE MODERN WORLD HIST.—E.15

Samuel M. Osgood, Ph.D., *Instructor in History, Brown University*

The social, economic and political problems of a civilization evolving from steam power to atomic power. The effects of industrialization on society will be examined in relation to such perennial questions as Man and the State; Individualism versus Collectivism; and International Relations.

Thursday, 7:00–9:40. 3 semester hours credit.

BASIC ISSUES IN MODERN AMERICAN GOVERNMENT*

POL. SCI.—E.132

George H. Merriam, A.M., *Lecturer*

A study of the organization, problems and future of present day United States government. Among the specific areas to be discussed are the changing nature of American political parties, the Presidency in mid-century, the question of state versus federal government, the paradox of subsidies and the Congressional riddle.

Wednesday, 7:00–9:40. 3 semester hours credit.

*Required for the Bachelor of Science Degree in Business Administration.

PHILOSOPHY

PROBLEMS AND TRENDS IN CONTEMPORARY PHILOSOPHY

PHIL.—E.112

Richard H. Schlagel, Ph.D., *Instructor in Philosophy*

An introduction to problems and trends in contemporary philosophy from Pragmatism and Absolute Idealism to Existentialism and Logical Empiricism. Designed to provide the means by which men and women may understand and evaluate their own beliefs, and relate them to the philosophical bases of their culture. No previous work in philosophy is required.

Tuesday, 7:00–9:40. 3 semester hours credit.

PSYCHOLOGY

GENERAL PSYCHOLOGY

PSY.—E.111

Herbert Lipton, Ph.D., *Lecturer*

An introduction to the principles of human behavior.

Wednesday, 7:00–9:40. 3 semester hours credit.

NORMAL PERSONALITY

PSY.—E.103

Robert W. Baker, Ph.D., *Assistant Professor of Psychology*

This course will deal with normal adult personality, our understanding of its nature and origins, and its relationship to problems of adjustment. Attention will be given to scientific approaches to the study of personality and the techniques for its measurement. Prerequisite: an introductory course in psychology.

Monday, 7:00–9:40. 3 semester hours credit.

INDUSTRIAL PSYCHOLOGY

PSY.—E.190

Bernard Kaplan, Ph.D., *Assistant Professor of Psychology*

A course dealing with the psychological factors underlying the interaction of individuals in their everyday working activities. Stress will be placed on social-psychological factors in the development of attitudes and values, conflicts in attitudes and values among different occupational groups, psychological factors in the maintenance and breakdown of industrial morale, etc. The use and abuse of psychological tests in industry will also be discussed.

Thursday, 7:00–9:40. 3 semester hours credit.

EMOTIONAL PROBLEMS OF CHILDREN

PSY.—E.176

Theodore Leventhal, Ph.D., *Assistant Professor (Affiliate) in Psychology,*
Chief Psychologist, Child Guidance Center

A study of emotional disturbances of children from infancy through adolescence. Typical problems involving habits, behavior, learning and interpersonal relations will be discussed from the standpoint of cause and treatment.

Tuesday, 7:30–9:20. 2 semester hours credit.

SOCIOLOGY

CRIME, DELINQUENCY AND CORRECTIONS SOC.—E.26

Albert Morris, Ph.D., *Chairman, Department of Sociology and Anthropology, Boston University*

The characteristics, causes, and treatment of delinquent and criminal behavior. Emphasis is upon the evaluation of experimental programs and the more promising current thinking and research with reference to delinquency and crime. Basic problems, policies, and perspectives of the new criminology viewed within the framework of current fact and theory in the behavioral sciences.

Monday, 7:00–9:40. 3 semester hours credit.

Business Administration

ACCOUNTING

PRINCIPLES OF ACCOUNTING* B.A.—E.117b

George E. Hargest, M.B.A., *Associate Professor of Economics and Business Administration*

The organization and use of financial records, with emphasis on their interpretation as well as on the techniques of procedure. Prerequisite: B.A.—E.117a or the equivalent.

Wednesday, 7:00–9:40. 3 semester hours credit.

INTERMEDIATE ACCOUNTING B.A.—E.127b

Robert J. Hurwitz, B.S., C.P.A., *Lecturer*

A study of generally accepted accounting principles and procedures and their application to asset, liability and proprietorship accounts. The analysis of financial statements, including statements from incomplete data and the statement of application of funds. Emphasis is placed upon problem analysis and solution. Open in either semester to students who have had B.A.—E.117a, b or equivalent.

Wednesday, 7:00–9:40. 3 semester hours credit.

ADVANCED FEDERAL TAX ACCOUNTING B.A.—E.130

Robert J. Hurwitz, B.S., C.P.A., *Lecturer*

An advanced course in federal income taxes with primary emphasis on preparation of returns and problem solutions. Topics include partnerships, corporations, estates and trusts, gift taxes, pension, profit-sharing plans, excise taxes and analysis of today's revenue service. Prerequisite: A basic course in tax accounting or equivalent experience.

Monday, 7:00–9:40. 3 semester hours credit.

*Required for the Bachelor of Science Degree in Business Administration.

AUDITING B.A.—E.227

Charles L. Sanders, M.B.A., C.P.A., *Lecturer*

An analysis of the purpose and scope of the several classes of audits, and an examination of professional ethics, auditing standards, internal control systems, audit procedures applicable to asset, liability and proprietorship accounts, and the use of worksheets and the preparation of statements and reports. Prerequisite: Intermediate accounting or equivalent experience.

Wednesday, 7:00–9:40. 3 semester hours credit.

MANAGEMENT

BUSINESS ORGANIZATION AND FINANCE* B.A.—E.18b

James M. Hund, Ph.D., *Assistant Professor of Economics and Sociology*

A course in the financial structure of modern industry with emphasis on the nature of the business corporation, its financial practices, types of securities, capital structure, financial reorganization, and the problems of internal financial control. Prerequisite: B.A.—E.18a or equivalent.

Tuesday, 7:00–9:40. 3 semester hours credit.

PRINCIPLES OF PURCHASING B.A.—E.25

Rudolph A. Johnson, B.B.A., *Lecturer*
Babson Institute of Business Administration

A study of procurement as one of the more recently recognized major functions of business, with particular emphasis on industrial purchasing. Presented from the point of view of top management, the purchasing agent and the industrial salesman. Topics to be considered include the scope of the procurement function, organization, relationship of procurement with other departments, purchasing procedures, quality determination, inventory control, and other allied topics. In addition to a review of principles and fundamental purchasing department operating techniques, consideration is given to case problems which illustrate application of principles in typical purchasing situations.

Thursday, 7:00–9:40. 3 semester hours credit.

PRODUCTION CONTROL B.A.—E.29

Everett P. Webster, M.B.A., *Lecturer*

A study of the function of production control as used by progressive industrial management, and of the interrelation of production control with other controls. Topics to be discussed include production forecasting, development and analysis, relating budgeting to production, routing of operations and processes, scheduling, control of materials, quality control and coordination. The case study method will be employed. Lectures will be supplemented by guest speakers and discussions.

Monday, 7:00–9:40. 3 semester hours credit.

*Required for the Bachelor of Science Degree in Business.

OFFICE MANAGEMENT B.A.—E.172

Samuel J. Lukens, Ph.D., *Lecturer*

A survey of the principles and practices which apply in the management of today's office. Attention will be given to managerial considerations affecting office layout, machines and equipment, personnel, working conditions, methods and procedures and the techniques of control. Problems to be studied will be drawn from both large and small offices.

Thursday, 7:00–9:40. 3 semester hours credit.

LAW, POLICY AND INDUSTRY SOC. B.A.—E.186

Frederick W. Killian, A.M., LL.B., *Associate Professor of Sociology*

Social control of business and industry by law. The function, structure and operation of law. How law draws on and applies social and economic ideas for its operation. The critical points of decision making. Law as a remedial system for social and economic conflict. Problems of the law. Legislation and the judicial process; the legal and judicial mind and method. Law as ritual and "ritualism" in law. The myth of "the law." Verbal reports of case analysis, selected cases, readings, projects prepared at home.

Tuesday, 7:00–9:40. 3 semester hours credit.

MARKETING

PRINCIPLES OF MARKETING* B.A.—E.124

Instructor to be announced

An analysis of the institutions and processes involved in the distribution of goods and services, including a study of consumer motivation, retailing and wholesaling institutions, and marketing policies and practices. Attention will be given to study and discussion of actual marketing problems.

Tuesday, 7:00–9:40. 3 semester hours credit.

MATHEMATICS

BUSINESS MATHEMATICS* B.A.—E.10

John S. Stubbe, Ph.D., *Associate Professor of Mathematics*

An introduction to the mathematical theory of simple and compound interest, annuities and life insurance, with various applications. Prerequisite: B.A.—E.9 or satisfactory score on a placement examination.

Monday, 7:00–9:40. 3 semester hours credit.

*Required for the Bachelor of Science Degree in Business Administration.

INSURANCE

PRINCIPLES OF CASUALTY AND PROPERTY INSURANCE INS.—E.16

Robert F. Green, M.B.A., C.L.U., *Lecturer*

A study of important types of casualty and property insurance; fire, workmen's compensation, liability, inland marine, suretyship and bonding, boiler, burglary and credit insurance.

Wednesday, 7:00–8:50. 2 semester hours credit.

Chartered Life Underwriter Insurance Courses

Robert F. Green, M.B.A., C.L.U., *Coordinator*

In cooperation with the Worcester Life Underwriters Association and the American College of Life Underwriters, the Evening College offers courses designed as preparation for the national examinations given annually on the Clark campus. Successful completion of the examinations leads to the award of the C.L.U. designation, a nationally recognized symbol of superior professional competency in the field of life underwriting. Further information regarding the American College and C.L.U. may be obtained from the Evening College.

During the present year Part C, Law, Trusts, and Taxes is being offered. The course, which carries no academic credit, has been in progress since September. Information regarding C.L.U. offerings in September, 1956, will be available in July.

LAW, TRUSTS, AND TAXES C.L.U.—PART C

Sumner Silver, LL.B., *Lecturer*

General commercial law, including law of life insurance; wills, trusts, and estates; taxation and business insurance for laymen engaged in life insurance underwriting.

Wednesday, 4:00–5:50. Non-credit. $34.00.

Chartered Property and Casualty Underwriter Courses

HENRY J. CIBOROWSKI, A.B., *Coordinator*

In cooperation with property and casualty insurance groups in Central Massachusetts, the Evening College offers courses designed by the American Institute for Property and Liability Underwriters to prepare underwriters for the national examinations given annually on the Clark campus.

Satisfactory performance in the series of five examinations leads to award of C.P.C.U., a nationally recognized symbol of professional excellence. Further information and bulletins published by the American Institute may be obtained from the Evening College.

During the present year Part I is being offered, as indicated below. The course, which carries no academic credit, has been in progress since September. Announcements concerning C.P.C.U. offerings beginning in September, 1956 will be available in July.

INSURANCE PRINCIPLES AND PRACTICES C.P.C.U.—PART I

Robert H. Butler, C.P.C.U., *Lecturer*

The economies of insurance; the insurance mechanism; contract provisions, the risk assumed and the other provisions; types of carriers (including self insurers); agency and brokerage; organization of carriers, internal and inter-carrier; state regulation and supervision.

Tuesday, 4:00–5:50. Non-credit. $34.00.

Training Program in Library Techniques

As a service to librarians in Central Massachusetts, the Evening College offers a series of informal, non-credit courses in basic library techniques for persons who wish to improve themselves and the service their library renders to the community, and for those who contemplate employment in small and medium-sized public libraries. Upon completion of the courses Clark University awards a Certificate of Achievement.

The basic program consists of two twelve week parts with one part offered in the spring of each year. Part I, consisting of two six week units of instruction, will be offered beginning March 8, 1956. Registration will be accepted by mail, and should be completed by March 1. *Additional information may be obtained from the Evening College.*

CATALOGING AND CLASSIFICATION (Thursdays, March 8 through April 19)

Henry Mailloux, A.M., *Cataloger, Mass. Div. of Library Extension*

The basic techniques of organizing library materials planned for librarians and assistants working in libraries where there are small book collections. Practice will be based on simplified procedures.

SOURCES AND METHODS OF INFORMATION (Thursdays, April 26 through May 31)

Miss Evelyn Weachter, A.M., *Reference Librarian, Fitchburg Public Library*

How to get and give information within the limits of a small library's collection. Examination and demonstration of basic tools for general reference service with some practice in their use.

Tuition: $24.00 Non-credit.

Nursing Education

In cooperation with the Evening College, the Boston University School of Nursing offers selected courses in nursing education on the Clark University campus during the late afternoon on an extramural basis. Designed as a service to graduate nurses in Central Massachusetts, they afford an opportunity for progress toward the Bachelor of Science degree at the School of Nursing. Offerings are determined by the School in consultation with an advisory committee representing local hospitals and public health agencies.

In addition, many of the liberal arts courses offered by the Evening College may be transferred to the School of Nursing in satisfaction of degree requirements, with the result that considerably more than half of the program may be completed in Worcester. Spring term Evening College courses recommended for nurses are indicated below.

Further information regarding requirements for the Bachelor of Science degree in nursing education at Boston University may be obtained from the Director. Students working for the degree are urged to apply for matriculation at the School of Nursing immediately upon commencement of their studies.

Courses Offered by Boston University, Spring, 1956

PRINCIPLES OF TEACHING NU—206X

Alice R. Major, A.M., *Assistant Professor,*
Boston University School of Nursing

A required foundation course designed to increase the awareness of the nurse's teaching responsibility in relation to patients, families and members of the nursing team. An understanding of the teaching-learning process, some ability in selection of learning experiences, use of teaching methods, communication skills, and techniques of evaluation have major emphasis.

Monday, 4:30–6:30. 2 semester hours credit. Tuition: $40.00.

NURSING IN REHABILITATION I NU—215X

Elizabeth C. Ernst, A.M., *Instructor,*
Boston University School of Nursing

Deals with the principles of posture and body mechanics as related to nursing and health supervision services in the prevention of deformities and maintenance of physical well-being. Recognition of deviations from the normal physical growth and development. An introduction to the philosophy of rehabilitation and the role of the nurse as a team member.

Thursday, 4:30–6:30. 2 semester hours credit. Tuition: $40.00.

Clark Evening College Courses Recommended for Nurses

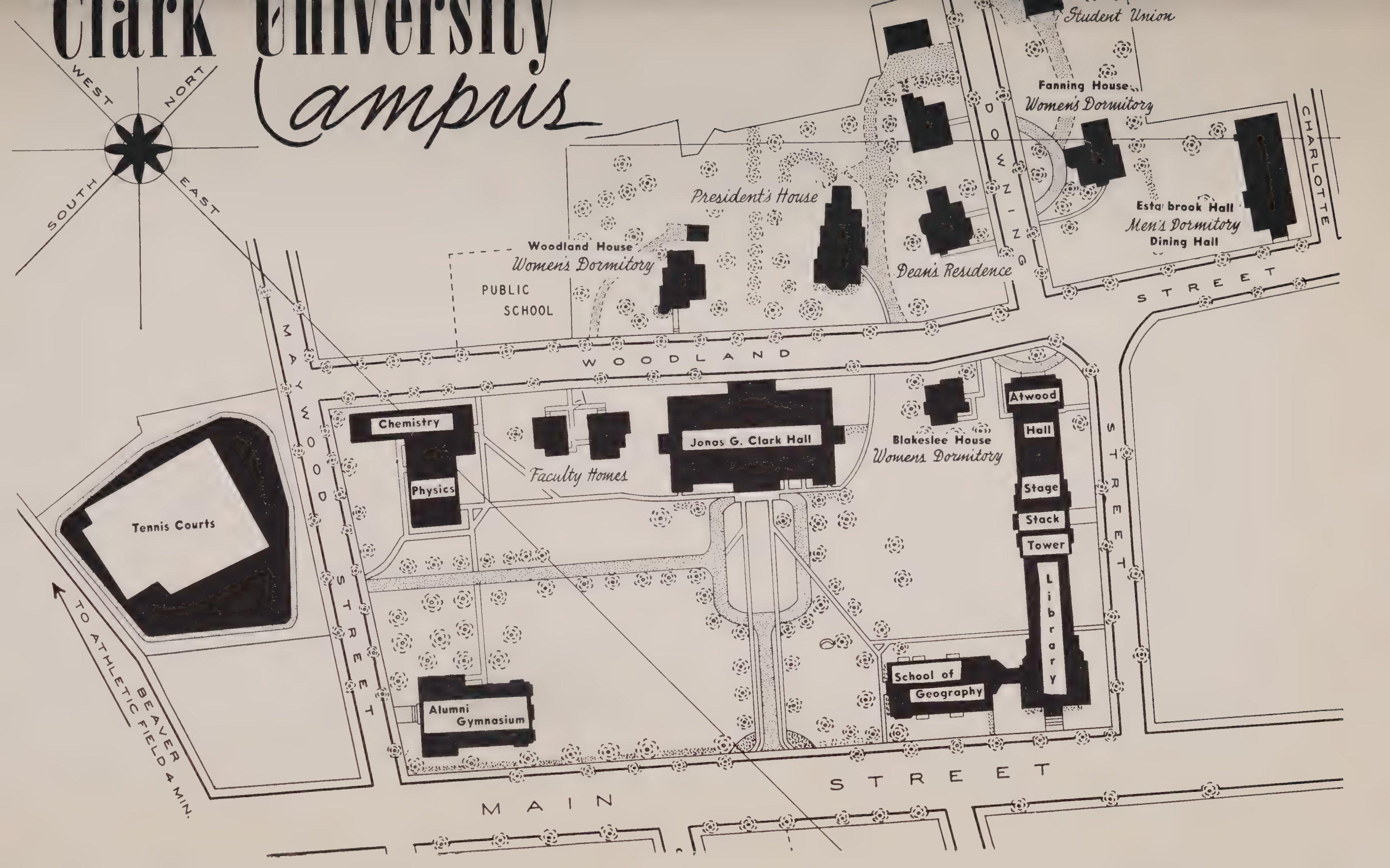
HUMAN ANATOMY AND PHYSIOLOGY	BIO.—E.19	(p. 13)

(As a special service to nurses in the area, this 4 semester hour laboratory course satisfies a specific nursing degree course requirement. It will meet on Monday and Thursday evenings in order that nurses in either or both of the nursing education courses may take it conveniently. A light evening meal may be obtained at the Student Union on the campus between 6:30 and 7:00.)

ENGLISH COMPOSITION AND LITERATURE	EN.—E.11b	(p. 11)
PUBLIC SPEAKING	EN.—E.12	(p. 11)
MODERN LITERATURE	EN.—E.123	(p. 12)
BASIC ISSUES IN MODERN AMERICAN GOVERNMENT	POL.SCI.—E.132	(p. 14)
PROBLEMS OF THE MODERN WORLD	HIST.—E.15	(p. 14)
GENERAL PSYCHOLOGY	PSY.—E.111	(p. 15)
CRIME, DELINQUENCY AND CORRECTIONS	SOC.—E.26	(p. 16)

Course Schedule

Number	*Course*	*Credit*	*Instructor*
MONDAY			
BIO. —E.19	Human Anatomy and Physiology (Lab)	4	Rudolph Nunnemacher
B.A. —E.10	Business Mathematics	3	John S. Stubbe
B.A. —E.29	Production Control	3	Everett P. Webster
B.A. —E.130	Advanced Federal Tax Accounting	3	Robert J. Hurwitz
C.L. —E.116	The German Contribution to World Literature	3	Karl J. R. Arndt
EC. —E.210	Consumer Economics	2	F. Eugene Melder
EN. —E.123	Modern Literature	3	Edward H. Hastings
PSY. —E.103	Normal Personality	3	Robert W. Baker
NU. —206X	Principles of Teaching	2	Alice R. Major
SOC. —E.26	Crime, Delinquency and Corrections	3	Albert Morris
	Advanced Creative Art Techniques. Non-credit		John H. Fulgoni
TUESDAY			
B.A. —E.18b	Business Organization and Finance	3	James M. Hund
B.A. —E.124	Principles of Marketing	3	To be announced
B.A.SOC. —E.186	Law, Policy and Industry	3	Frederick W. Killian
EC. —E.111b	Principles of Economics	3	Roger C. Van Tassel
EN. —E.12	Public Speaking	3	Robert S. Illingworth
F.A. —E.20	Great American Artists	2	Charlotte B. Johnson
PHIL. —E.112	Problems and Trends in Contemporary Philosophy	3	Richard H. Schlagel
PSY. —E.176	Emotional Problems of Children	2	Theodore Leventhal
SW. —E.11b	Beginning Swedish	2	Vanja Boklund
C.P.C.U. Part I	Insurance Principles and Practices. Non-credit		Robert H. Butler
	Adventures in Creative Art for Everyone. Non-credit		John H. Fulgoni
WEDNESDAY			
B.A. —E.117b	Principles of Accounting	3	George E. Hargest
B.A. —E.127b	Intermediate Accounting	3	Robert J. Hurwitz
B.A. —E.227	Auditing	3	Charles L. Sanders
EN. —E.11b	English Composition and Literature—Section I	3	Edward H. Hastings
	—Section II	3	William H. Carter
INS. —E.16	Principles of Casualty and Property Insurance	2	Robert F. Green
POL. SCI.—E.132	Basic Issues in Modern American Government	3	George H. Merriam
PSY. —E.111	General Psychology	3	Herbert Lipton
CLU —Part C	Law, Trusts, and Taxes. Non-credit		Sumner Silver
THURSDAY			
BIO. —E.19	Human Anatomy and Physiology (Lecture)	4	Rudolph F. Nunnemacher
B.A. —E.25	Principles of Purchasing	3	Rudolph A. Johnson
B.A. —E.172	Office Management	3	Samuel J. Lukens
EN. —E.22	Fiction Writing	3	William E. Harris
HIST. —E.15	Problems of the Modern World	3	Samuel M. Osgood
MU. —E.126	The Music of Beethoven	3	Edward H. Hastings
NU. —215X	Nursing in Rehabilitation I	2	Elizabeth C. Ernst
PHYS. —E.10	Introduction to Physical Science	3	Percy M. Roope
PSY. —E.190	Industrial Psychology	3	Bernard Kaplan
SP. —E.11b	Beginning Spanish	2	Raymond E. Barbera


Clark University
Campus
WEST
NORT
SOUTH
EAST
Student Union
Fanning House
Womens Dormitory
DOWNING
CHARLOTTE
Esta brook Hall
Men's Dormitory
Dining Hall
STREET
President's House
Dean's Residence
Woodland House
Womens Dormitory
PUBLIC SCHOOL
WOODLAND
MAYWOOD STREET
Atwood
Hall
Stage
Stack
Tower
Library
Blakeslee House
Womens Dormitory
Jonas G. Clark Hall
Faculty Homes
Chemistry
Physics
School of Geography
Alumni Gymnasium
Tennis Courts
STREET
MAIN STREET
BEAVER
TO ATHLETIC FIELD 4 MIN.

CLARK UNIVERSITY
FIAT LUX
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CLARK UNIVERSITY

1956

Summer
School

Intersession June 11 to June 30

Summer Session July 2 to August 17

CALENDAR

June

11 Monday, *Intersession Registration* 9–12 Noon
First class meeting 2 P.M.

27 Wednesday, Registration for Evening Classes

30 Saturday, Examinations for Intersession Courses 9–12 Noon

July

2 Monday, *Summer Session Registration* for day classes 9–12 Noon
Evening Classes begin 6 P.M.

3 Tuesday, Day classes begin 8 A.M.

4 Wednesday, A holiday

12–14 Thursday through Saturday, Writers' Conference

19–20 Thursday–Friday, Conference on Corrections

21 Saturday, Examinations in double courses concluding after first three weeks

23 Monday, Beginning of double courses of second three weeks

August

14 Tuesday, No Classes

15 Wednesday, Examination for classes meeting at 8 A.M.—9 to 12 Noon
for evening classes meeting at 6 P.M.—7 to 10 P.M.

16 Thursday, Examination for classes meeting at 9:15 A.M.—9 to 12 Noon

17 Friday, Examinations for classes meeting at 10:30 A.M.—9 to 12 Noon
for classes meeting at 11:45 A.M.—2 to 5 P.M.
for evening classes meeting at 8 P.M.—7 to 10 P.M.

1956

JUNE

SUN	MON	TUE	WED	THU	FRI	SAT
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

JULY

SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

AUGUST

SUN	MON	TUE	WED	THU	FRI
			1	2	3
5	6	7	8	9	10
12	13	14	15	16	17
19	20	21	22	23	24
26	27	28	29	30	31

CLARK UNIVERSITY BULLETIN

Number 222 January, 1956

Clark University
SUMMER SCHOOL

Intersession, June 11—June 30
Summer Session, July 2—August 17

1956

The Bulletin is published four times a year, January, February, March, and December.

Entered as second-class matter December 29, 1920, at the Post Office at Worcester, Mass., under the Act of August 24, 1912. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized January 24, 1921.

A Unique Opportunity to Learn

The 1956 Clark University Summer Session is an experiment designed to provide a unique opportunity for summer college study in Central Massachusetts. Intensive instruction in numerous fields will be offered in the intimate and pleasant atmosphere of a small university. In an effort to provide as broad an educational experience as possible, the University will make available a varied program of informal afternoon discussions and teas, evening lectures and conferences, and week-end excursions to famous New England cultural and recreational centers.

Throughout the program emphasis will be placed upon effective learning through a synthesis of superior teaching, individual attention, and a relaxed, pleasant atmosphere. Small classes will meet outdoors at various campus locations.

Members of the regular Clark faculty, assisted by distinguished visitors, will teach a variety of undergraduate and graduate courses in liberal arts, business and education. Both day and evening classes will be offered.

Clark is ideally located for summer study in Worcester, an outstanding cultural center in the heart of New England. The summer climate is pleasant, and the city is within easy reach of mountains, lakes, and superb New England scenery. A multitude of important and interesting historical points are only a short distance away.

DETAILS OF INTEREST

A refreshment and social hour for all students and faculty will be held in the shade of the campus trees Tuesday and Thursday afternoons at 3:15 P.M. This will be followed by an informal seminar open to all, at which a member of the faculty will discuss some particular phase of the course which he is conducting, of general interest and pertinent to our times. By attending these seminars the student has the opportunity of broadening his horizons and becoming more widely acquainted with the faculty and their special interests.

Summer School students will have the opportunity of attending the Writers' Conference July 12th through 14th at special rates. Details may be had by writing to the Director of the Summer School.

For social science students the Massachusetts Correctional Institute ought to be of especial interest. This conference on July 19 and 20 will clarify the new administrative policies in the correctional and penal system of the Commonwealth.

Clark University has excellent library facilities featuring an "open shelf" system with an opportunity for unlimited browsing. The number of modern books and professional periodicals available is large and varied. The map library is almost uniquely rich. The library will be open on Mondays and Wednesdays from 9 A.M. until 8 P.M.; on Tuesdays, Thursdays, and Fridays from 9 A.M. until 5 P.M.

A group of eleven university students from Switzerland will be visitors at Clark during the last two weeks of the Summer Session through special arrangement with the Experiment in International Living. They will reside in the dormitories, visit classes, and join our students in all activities to understand student life in an American University and to promote international good will.

Students are strongly urged to participate in the extracurricular activities such as the special conferences, the biweekly seminars, and the many week-end tours which are offered at cost or student rates. A full day excursion to the famous Ted Shawn's Dance Festival at Jacob's Pillow and to the even better known Berkshire Music Festival will be an unusually rewarding experience for those even slightly interested in the fine arts. The trips to the colonial settlements at Plymouth or Deerfield, or to nearby Sturbridge Village, a reproduction of an eighteenth century New England community, prove ever interesting to the first or oft-time visitor with the exceptional display of fine buildings, their antique furnishings and the exhibition of ancient hand crafts. For the more athletic there are the excursions to the Cape's unique dunes and beaches, and to New Hampshire's famous geological prototype, Mt. Monadnock. The student should not fail to visit Worcester's fine Art Museum and the renowned collection of armor at the Higgins Museum. Small groups of students are always welcome to join the many class excursions to nearby points of historical, social, or educational interest.

ADMISSIONS

Students are eligible for admission to the Summer School if they are undergraduate or graduate students at Clark University or elsewhere. Freshmen beginning their college studies in the summer must present a statement of admission to a recognized college. Persons of maturity who are not candidates for academic degrees may also pursue their scholastic interests at the University. Clark Evening College students can be admitted to any scheduled classes, but are urged to plan their program with Mr. Robert Hyde, Director, Evening College.

Admission to the Summer School does not guarantee admission to the regular terms.

An application for admission is enclosed or may be obtained by writing to the Summer School and should be filled out and submitted at an early date to facilitate registration. All students who preregister must verify their registration on June 11 for the Intersession and July 2 for the Summer Session. Tuition must be paid on the registration days.

DEGREES AND CREDITS

All courses offered are accepted at Clark for credit toward the degrees of Bachelor of Arts and Bachelor of Business Administration, or the Evening College degrees of Bachelor of Science in General Studies and Bachelor of Science in Business Administration unless specifically limited to one of the degrees as stated in the course description. Many courses in the Summer School count toward the degrees of Master of Arts, Master of Arts in Education, and Doctor of Philosophy. Approval should, however, be obtained in advance from a student's major department.

The degree of Master of Arts may be obtained in certain fields by completing satisfactorily a full-time program for five summers. It is best for students interested in such a program to discuss their plans directly with the Chairman of the department concerned. Graduate students formally registered in the Summer School may, with the approval of their major department, enroll in thesis courses under the direction of regular members of the Staff other than those listed in the present Bulletin.

Each single course offered in the Summer School is equivalent to a half-year course of the academic year and yields three semester hours of credit. The double courses in the languages, which meet for two lecture periods a day for six and one-half weeks are equivalent to year courses (six semester hours credit).

The double courses in Education which meet during the first three weeks (July 2 to July 21) of the Summer Session yield three semester hours credit; those which meet during the second three weeks (July 21 to August 17), also yield three semester hours of credit.

A student may carry in a normal program one course in the Intersession (three semester hours) and two courses in the Summer Session (six semester hours). Permission to carry an additional course may be granted in exceptional cases if approved in writing by the Dean prior to registration. Course changes after registration day must be approved by the College Board.

A transcript of a student's Summer School record is available free of charge, but application for it should be made in the Summer School office.

TUITION AND FEES

A matriculation fee of $5.00 is required of all students entering Clark University for the first time. The tuition for each three semester hour course is $60.00. Persons who wish to audit a course without receiving credit register and pay tuition at the stated rate. Students carrying two courses during the Summer Session may audit a third course without additional cost. An activities fee of $3.00 is required of all students. Tuition and fees must be paid at the Bursar's Office immediately following registration. A fee for late registration of $1.00 per day, to a maximum of $5.00 must be paid by students who fail to complete registration within the official Registration Period.

Students who attend one week of classes in the Intersession or two weeks in the Summer Session are obligated to pay the full tuition charges and cannot withdraw without a record of failure unless they petition the College Board for special consideration.

LIVING FACILITIES AND COSTS

Dormitory facilities for both men and women are available, but reservations should be made promptly on or before June 1. Room rent is $15.00 for the Intersession and $35.00 for the Summer Session. A room and key deposit of $10.00 is required in advance to hold a room. This deposit is not part-payment for the rent. The $10.00 will be returned in full if the room is undamaged when the key is returned.

The facilities of the Student Union are available to all students throughout the week. Excellent meals and refreshments are served at reasonable cost.

VETERANS

Veterans attending the 1956 Summer School should present their supplemental Certificate of Eligibility at the Veterans' window in the Bursar's Office not later than Friday of the first full week of the term. The Director of the Summer School should be consulted when unusual or unexpected situations arise.

Veterans are reminded that Certificates of Eligibility held during the Spring Semester 1956 do not apply to the Summer School and that a new application must be completed for the course of summer study.

World War II Veterans will not be able to obtain educational benefits after July 25, 1956 under Bill 346, but must pay the remaining prorated tuition and fees from July 25 to August 17 out of pocket.

ELIGIBILITY FOR COURSES

Courses beginning with "1" are open to all undergraduates except freshmen. Courses preceded by an "F" are open to freshmen. Courses beginning with "2" are open to advanced undergraduates and graduate students. Teachers working toward degrees or credits in Education should consult with Professor Vernon Jones, Chairman of the Department of Education.

Intersession courses meet for two 70 minute periods at 9:00 A.M. and at 2:00 P.M., Monday through Friday. Summer Session courses during the day meet for one 70 minute period Monday through Friday. Double courses meet for two 70 minute periods five days a week. Evening classes meet for 140 minutes on Monday, Wednesday and Friday evenings. Exceptions to the above time schedule are listed under course descriptions.

ADMINISTRATIVE OFFICERS OF THE UNIVERSITY

Howard B. Jefferson, *President*
Rudolph F. Nunnemacher, *Director of the Summer School*
H. Donaldson Jordan, *Chairman of the College Board*
Henry C. Borger, Jr., *Dean of Men*
M. Hazel Hughes, *Dean of Women*

SUMMER SCHOOL STAFF

(All are members of the Clark University Faculty unless otherwise indicated)

Helen G. Agbay, M.A., *Lecturer in Clark University Evening College*
Karl O. E. Anderson, Ph.D., *Associate Professor of English, Chairman of English Department*
Karl J. R. Arndt, Ph.D., *Professor of German, Chairman of German Department*
Robert W. Baker, Ph.D., *Assistant Professor of Psychology*
James F. Beard, Jr., Ph.D., *Assistant Professor of English*
Robert N. Beck, Ph.D., *Assistant Professor of Philosophy*
Marvin D. Bernstein, Ph.D., *Visiting Lecturer, Instructor, Worcester State Teachers College*
Henry C. Borger, Jr., Ph.D., *Associate Professor of Education*
Guy H. Burnham, M.A., *Instructor in Geography, Cartographer*
Richard B. Carpenter, Ph.D., *Assistant Professor of Fine Arts*
William H. Carter, Jr., Ph.D., *Associate Professor of English*
Ely Chinoy, Ph.D., *Visiting Lecturer, Assistant Professor of Sociology, Smith College*
Thomas E. Christensen, D.Ed., *Visiting Lecturer, Director, Guidance Service, Worcester Public Schools*
John D. Cushing, M.A., *Visiting Lecturer*
Manuel Durán, Ph.D., *Visiting Lecturer, Assistant Professor, Smith College*
James S. Edwards, M.A., *Assistant Professor of German*
Melvin H. Feffer, Ph.D., *Visiting Lecturer, Research Psychologist, Worcester State Hospital*
Carl J. Gladfelter, M.B.A., *Visiting Lecturer, Associate Professor of Marketing, University of Connecticut*
George E. Hargest, M.B.A., *Associate Professor of Business Administration*
Edward C. Haskins, M.S., *Visiting Lecturer, Instructor in Geography, Yale University*
Edward H. Hastings, M.A., *Lecturer in English*
Robert J. Hybels, M.A., *Assistant Professor of Education*
Vernon Jones, Ph.D., *Professor of Educational Psychology, Chairman, Department of Education*
Bernard Kaplan, Ph.D., *Assistant Professor of Psychology*
Frederick W. Killian, LL.B., *Associate Professor of Sociology*
Donald H. Letendre, M.A., *Assistant Professor of English*
James A. Maxwell, Ph.D., *Professor of Economics, Chairman, Department of Economics*
F. Eugene Melder, Ph.D., *Associate Professor of Economics*
George H. Merriam, M.A., *Lecturer in History*
Robert Misch, Ph.D., *Visiting Lecturer, Clinical Psychologist, Boston V.A. Hospital*
Montagu F. Modder, Ph.D., *Visiting Lecturer, Professor of English, Beloit College*
Theodore Nicol, Ph.D., *Associate Professor Romance Languages*
Stanley W. Norwood, M.Ed., *Visiting Lecturer, Director of Music, Worcester Public Schools*
Rudolph F. Nunnemacher, Ph.D., *Professor of Biology, Director, Summer School*
Jacques P. Pagès, *Licencié ès Lettres, University of Toulouse, France, Visiting Lecturer*

Marc Raeff, Ph.D., *Assistant Professor of History and Russian Language*

J. Richard Reid, Ph.D., *Associate Professor, Romance Languages, Chairman, Department Romance Languages*

Murat H. Roberts, Ph.D., *Visiting Lecturer, Emeritus Professor of German, University College and Graduate School, New York University*

Harris Rosenkrantz, Ph.D., *Visiting Lecturer, Staff Member, Worcester Foundation for Experimental Biology*

Richard H. Schlagel, Ph.D., *Instructor in Philosophy*

Albert J. Schwieger, Ph.D., *Visiting Lecturer, Professor of Economics and Chairman, Department of Economics, Worcester Polytechnic Institute*

Dayton D. Shepherd, M.A., *Visiting Lecturer, Principal of Durham School, Durham, Connecticut*

David Shepro, M.A., *Visiting Lecturer, Assistant Professor of Biology, Simmons College*

John S. Stubbe, Ph.D., *Associate Professor of Mathematics*

Roger C. Van Tassel, M.A., *Assistant Professor of Economics*

Samuel VanValkenburg, Ph.D., *Professor of Geography and Director, Graduate School of Geography*

Henry J. Warman, Ph.D., *Associate Professor of Geography*

Frank R. Yulo, M.A., *Visiting Lecturer, Durham School, Durham, Connecticut*

COURSES OFFERED

BIOLOGY

S.19	Human Anatomy and Physiology	Shepro	10:30 and Labs.
GE-S.112	Man: His Heredity and Evolution	Shepro	11:45 A.M.
S.224	Neuroanatomy	Nunnemacher	Intersession
S.244	Biochemistry	Rosenkrantz	8:00 A.M.
S.370	Research in Biology	Staff	

BUSINESS ADMINISTRATION

*S.16	Business Statistics (double course)	Hargest	9:15 to 11:40 A.M.
S.17	Public Speaking (two classes)	Letendre, Beard	8:00 A.M. or 8:00 P.M
S.109	Sales Management	Gladfelter	6:00 P.M., M., W., F.
S.124	Marketing Problems	Gladfelter	8:00 P.M., M., W., F.
S.132	Human Relations in Industry	Schwieger	Inters. 8:00–10:25 A.M.

CHEMISTRY

~~*S.13~~	~~Organic Chemistry~~		8:00–10:25 A.M. and Lab

ECONOMICS

S.11a	Principles of Economics (part I)	Melder	Intersession
S.11b	Principles of Economics (part II)	Van Tassel	9:15 A.M.
S.15	Public Finance	Maxwell	Intersession
S.21	National Income Analysis	Van Tassel	10:30 A.M.
S.28	Research in Economic Problems	Staff	

EDUCATION

~~S.20~~	~~Geography in Education~~	~~Warman~~	~~8:00 A.M.~~
~~S.112~~	~~Music in Education~~	~~Norwood~~	~~11:45 A.M.~~
~~S.217~~	~~The Use of Community Resources in Teaching~~	Borger	11:45 A.M.
**S.201	Child Growth and Development	Yulo	10:30–12:55 A.M.
**S.213	Guidance Services	Christensen	10:30 A.M.
**S.223	Demonstration—Elementary School Teaching	Shepherd	9:15–11:40 A.M.
***S.204	Child Development and Curriculum	Shepherd	10:30–12:55 A.M.
***S.225	Demonstration—High School Teaching	Shepherd, Yulo	9:15–11:40 A.M.
***~~S.237~~	~~School Administration~~	~~Jones et al.~~	~~10:30–12:55 A.M.~~

ENGLISH

S.11a	Composition and Literature	Modder	Intersession
S.11b	Composition and Literature	Carter	9:15 A.M.

S.12	Public Speaking (two classes)	Letendre, Beard	8:00 A.M. or 8:00 P.M.
S.102	The Concept of Tragedy in Eng. and Am. Lit.	Anderson	Intersession
S.103	The Comic Spirit in Eng. and Am. Lit.	Carter	8:00 A.M.
S.106	Contemporary American Fiction	Beard	6:00 P.M., M., W., F.
~~S.107~~	~~Literature of the East~~	~~Modder~~	~~10:30 A.M.~~

FINE ARTS

~~S.112~~	~~Music in Education~~	~~Norwood~~	~~11:45 A.M.~~
S.122	Introduction to Symphonic Music	Hastings	Intersession
-S.144	Introduction to Western Civilization	Edwards	Travel Course
S.151	Sculpture and Painting of the High Renaissance	Carpenter	Intersession
S.171	Modern Art	Carpenter	6:00 P.M., M., W., F.

GEOGRAPHY

S.16	Economic Geography	Haskins	11:45 A.M.
S.20	Geography in Education	Warman	8:00 A.M.
S.191	Cartography (single or double course)	Burnham	1:30 P.M. and Labs.
S.201	Problem Areas of the World	VanValkenburg	9:15 A.M.
S.288	The Tropical World	Haskins	10:30 A.M.
S.300	Research in Geography	Staff	

HISTORY AND GOVERNMENT

~~S.15b~~	~~Introduction to American Government~~	~~Cushing~~	~~10:30 A.M.~~
S.26	Modern Latin America	Bernstein	10:30 A.M.
S.142	World Affairs	Bernstein	6:00 P.M., M., W., F.
S.204	Modern European Intellectual History	Raeff	Intersession
S.231	American Colonial History	Merriam	8:00 A.M.
S.233	The West in American History	Borger	9:15 A.M.
S.239	America in Perspective	Hybels	8:00 P.M., M., W., F.
~~S.291~~	~~France and the North African Crisis~~	~~Pagès~~	~~11:45 A.M.~~

LANGUAGE

*S.12	Intermediate French	Nicol & Reid	9:15 A.M. and 2:00 P.M.
*S.14	Readings in French Literature	Reid & Nicol	9:15 A.M. and 2:00 P.M.
*S.11	Beginning German	Arndt	9:15 A.M. and 2:00 P.M.
*S.12	Intermediate German	Roberts	9:15 A.M. and 2:00 P.M.
*S.11	Beginning Spanish	Agbay	9:15 A.M. and 2:00 P.M.
*S.12	Intermediate Spanish		9:15 A.M. and 2:00 P.M.
*S.14	Readings in Spanish Literature	Durán	9:15 A.M. and 2:00 P.M.

MATHEMATICS

S.11b	Trigonometry and Analytical Geometry	Stubbe	8:00 A.M.
S.15	Numerical Analysis	Stubbe	10:30 A.M.

PHILOSOPHY

~~S.101~~	~~The Philosophy of Science~~	~~Schlagel~~	~~Intersession~~
S.114	The Philosophy of Americanism	Beck	9:15 A.M.
S.121	Classical American Philosophers	Beck	8:00 A.M.

PSYCHOLOGY

S.172	Theories of Personality	Baker	Intersession
~~S.180~~	~~Culture and Personality~~	~~Misch~~	~~8:00 A.M.~~
S.188	Psych. of Individual Mass Communication	Kaplan	8:00 P.M., M., W., F.
~~S.203~~	~~Abnormal Personality~~	~~Feffer~~	~~11:45 A.M.~~
~~S.300~~	~~Research in Psychology~~	~~Staff~~	

SOCIOLOGY

S.11a	Understanding Our Society	Killian	10:30 A.M.
S.224	The Sociology of City Life	Killian	11:45 A.M.
S.215	Class Structure in American Society	Chinoy	Inters. 10:00–12:30 P.M.

Double Course, two classes daily through summer session.

Double Course, two classes daily, first three weeks, July 2—July 24.

Double Course, two classes daily, second three weeks, July 25—August 17.

COURSE OFFERINGS

Biology

Intersession

BIO.—S.224 NEUROANATOMY

Rudolph F. Nunnemacher, *Professor of Biology*

A detailed study of the nervous system with emphasis on the functional relationships within the spinal cord and brain. The lectures are supplemented with studies of gross and microscopic specimens and models which aid the student in forming a clearer concept of man's most complex organ system.
Prerequisite: One year of Biology.

Clark Hall 206 Mon. through Fri., 9:00 A.M. and 2:00 P.M.

Summer School

F.—BIO.—S.19 HUMAN ANATOMY AND PHYSIOLOGY

David Shepro, *Assistant Professor of Biology, Simmons College*

A detailed review of the structure, performance, and interrelation of the organ systems of the body. Laboratory exercises with preserved and living material will give emphasis to the form and function of the living body.

Laboratory fee: $10.00. Mon. through Fri., 10:30–11:40 A.M.
Clark Hall 206 Labs. Mon. and Wed., 1:00–4:30 P.M.

F.—G.E.—S.112 MAN: HIS HEREDITY AND EVOLUTION

David Shepro, *Assistant Professor of Biology, Simmons College*

The course is intended to give students a concept of organic evolution, the body of scientific evidence that supports this concept, and the mechanics that have made evolution possible. The above is supplemented with emphasis on the history and philosophy of evolution.

Clark Hall 206 Mon. through Fri., 11:45–12:55 P.M.

BIO.—S.244 BIOCHEMISTRY

Harris Rosenkrantz, *Staff Member,*
Worcester Foundation for Experimental Biology

The principles and mechanisms of biochemical reactions in an understanding of the metabolism of foodstuffs and the role of enzymes, vitamins and hormones. An acquaintance with the instrumentation in biochemical research will be presented. The course will include laboratory demonstrations with student participation, field trips to the Worcester Foundation, student seminars and guest lecturers. Prerequisite: Organic Chemistry.

Clark Hall 206 Mon. through Fri., 8:00–9:10 A.M.

BIO.—S.370 RESEARCH IN BIOLOGY

Graduate research studies may be carried out under the direction of available staff members during the Summer School. The course is primarily for those who have been previously enrolled in the Graduate School. Approval by the staff member will be required prior to admission.

Business Administration

Intersession

B.A.—S.132 HUMAN RELATIONS IN INDUSTRY

Albert J. Schwieger, *Professor of Economics,*
Worcester Polytechnic Institute

The work consists of the analysis of concrete cases involving the handling of human situations at all levels of activity. Study centers around the development of understanding of the psychological, sociological and economic factors of motivation in industry.

Clark Hall 220 Mon. through Fri., 8:00–10:25 A.M.

Summer Session

*B.A.—S.16 BUSINESS STATISTICS

George E. Hargest, *Associate Professor of Business Administration*

This course is designed to give the student a knowledge of the basic statistical techniques and procedures as they are applied to business and economic data. Lectures and laboratory exercises.

Clark Hall 217 Mon. through Fri., 9:15–11:40 A.M.

F.—B.A.—S.17 PUBLIC SPEAKING

James F. Beard, Jr., *Assistant Professor of English*

For course description see section on English.

(Candidates for the B.B.A. degree should use course No. B.A.—S.17; candidates for the A.B. degree should use the course No. Eng.—S.12.)

Clark Hall 303 Mon., Wed. and Fri., 8:00–9:50 P.M.

B.A.—S.109 SALES MANAGEMENT

Carl J. Gladfelter, *Associate Professor of Marketing,*
University of Connecticut

This course is designed to consider the major problems faced in the management of the sales segment of the business as well as giving emphasis to several topics dealing with the management of salesmen. The subject matter will cover management policies as related to sales administration; selection; compensation; personnel control; quotas; territories; costs and budgets. (This course may not be counted toward the A.B. degree, but only toward a business degree.)

Clark Hall 217 Mon., Wed. and Fri., 6:00–7:50 P.M.

B.A.—S.124 MARKETING PROBLEMS

Carl J. Gladfelter, *Associate Professor of Marketing,*
University of Connecticut

An analysis of marketing problems from the management point of view. These problems deal with such major activities as: determination of products to sell; of prices, of channels of distribution, relations with middlemen, organization of the marketing division, co-ordination of its activities with those of other divisions of the company, management and control of sales force and evaluation of marketing policies of the company. Prerequisite: Principles of Marketing.

Clark Hall 217 Mon., Wed. and Fri., 8:00–9:50 P.M.

*Double Course, two classes daily through summer session.

Chemistry

Summer Session

Omitted

~~*CHEM.—S.13 ORGANIC CHEMISTRY~~

~~Instructor to be announced~~

~~Lectures on the principles of organic chemistry and a laboratory study of the preparation and properties of important organic compounds. A double course requiring the undivided attention of the student. Prerequisite: General Chemistry.~~

~~Laboratory fee: $30.00. Lectures: Mon. through Fri., 8:00–10:25 A.M.~~
~~Breakage deposit: $20.00. Laboratory: Mon. through Fri., 4 to 5 hours daily~~

Economics

Intersession

EC.—S11a. PRINCIPLES OF ECONOMICS (Part I)

F. Eugene Melder, *Associate Professor of Economics*

The first half of an introduction to the fundamental economic principles, together with a study of the practical application of these principles to the problems of American life. The second half will be given during the Summer Session.

Clark Hall 215 Mon. through Fri., 9:00–10:10 A.M. and 2:00–3:10 P.M.

EC.—S.15 PUBLIC FINANCE

James A. Maxwell, *Professor of Economics*

The principles of governmental expenditures, revenues, and debts, with particular reference to the United States.

Clark Hall 217 Mon. through Fri., 9:00–10:10 A.M. and 2:00–3:10 P.M.

Summer School

EC.—S.11b PRINCIPLES OF ECONOMICS (Part II)

Roger C. Van Tassel, *Assistant Professor of Economics*

The second half of the Principles of Economics course, begun in the Intersession.

Clark Hall 215 Mon. through Fri., 9:15–10:25 P.M.

EC.—S.21 NATIONAL INCOME ANALYSIS

Roger C. Van Tassel, *Assistant Professor of Economics*

A study of national income accounts and analysis of depression, full employment and inflation under capitalism. Special emphasis on the work of J. M. Keynes and other contemporaries.

Clark Hall 215 Mon. through Fri., 10:30–11:40 P.M.

~~EC.—S.28 RESEARCH IN ECONOMIC PROBLEMS~~

~~Graduate research studies may be carried out under the direction of available staff members during the Summer School. The course is primarily for those who have been previously enrolled in the Graduate School. Approval by the staff member will be required prior to admission.~~

~~*Double Course, two classes daily through summer session.~~

Education

Summer Session

~~ED.—S.20 GEOGRAPHY IN EDUCATION~~

Henry J. Warman, *Associate Professor of Geography*

For course description see section on Geography.

~~ED.—S.112 MUSIC IN EDUCATION~~

Stanley W. Norwood, *Director of Music,*
Worcester Public Schools

This course will cover the teaching of such topics as note reading; use of pitch pipe, Kindertone bars, auto harp, and preband instruments. Emphasis will be placed on phases of music most needed and suggested by the participants. The course is designed to give special help to those teachers who have had little or no training in teaching of music and who might be required to assist in teaching this subject in elementary or secondary grades. Qualified juniors and seniors may count these credits in education upon permission of the Education Department and the approval of admission by the instructor upon certification that they have an adequate background in music. This course presupposes little musical background.

Clark Hall 102 Mon. through Fri., 11:45–12:55 P.M.

**ED.—S.201 EDUCATIONAL PSYCHOLOGY—CHILD GROWTH AND DEVELOPMENT

Frank R. Yulo, *Durham Public Schools, Durham, Conn.*

A study of the growth and development of the child in relation to his experience in school. Systematic study will be made of the organismic changes in the child from birth to and including adolescence, and consideration will be given to the importance of maturation, growth, and social learning in effecting these changes. Attention will be focused on those factors in personality and emotional development over which the school has control. The interplay between the forces in the growing organism and the impact of various aspects of development upon each other will be considered. Procedures include class discussion, observation of children, use of visual aids, and individual projects.

Clark Hall 304 Mon. through Fri., 10:30–12:55 P.M.

***ED.—S.204 CHILD DEVELOPMENT IN RELATION TO THE CURRICULUM

Dayton D. Shepherd, *Principal, Durham School, Durham, Conn.*

A study of the curriculum of both the elementary and high school levels in relation to child growth and development. The course will deal with implications of the child development point of view and of research findings in the field of child development, the meaning of the child development approach, and a number of the principles of development that have implications for education and the curriculum. An evaluation of some of the subjects offered along with modern theory and practice in relation to growth and development of the modern school.

Clark Hall 304 Mon. through Fri., 10:30–12:55 P.M.

**Double Course, two classes daily, first three weeks, July 2—July 24.

***Double Course, two classes daily, second three weeks, July 25—August 17.

**ED.—S.213 ORGANIZATION OF GUIDANCE SERVICES IN SCHOOLS

Thomas E. Christensen, *Director of Guidance, Worcester Public Schools*

This course will describe principles and procedures for organizing adequate guidance programs in elementary and secondary schools. Particular attention will be paid to useful techniques for developing the occupational information service and for locating and utilizing school and community resources helpful in guiding children. Consideration will be given to procedures for organizing the counseling and supporting services, and attention will also be given to methods of integrating guidance with instruction.

Clark Hall 305 Mon. through Fri., 9:15–11:40 A.M.

ED.—S.217 THE USE OF COMMUNITY RESOURCES IN TEACHING

Henry C. Borger, Jr., *Assistant Professor of Education*

Any community has resources that can be used to develop in students a fuller appreciation of the immediate world in which they live and to help them ultimately become better members of that or any other community. This course represents an organized effort to bring students and teachers into contact with historical and geographic backgrounds, cultural groups, agencies, housing developments, industrial and labor organizations in the Worcester area. The main emphasis will be in the social studies but other fields will be explored according to the needs of the class. Field trips, guest speakers, films and other audio-visual materials will be the principal means used to develop the course.

Clark Hall 301 Mon. through Fri., 11:45–12:55 P.M.

**ED.—S.223 A DEMONSTRATION IN METHODS AND MATERIALS IN TEACHING IN THE ELEMENTARY SCHOOL

Dayton D. Shepherd, *Principal, Durham School*
Frank R. Yulo, *Durham Public Schools, Durham, Conn.*

A course in which modern methods and materials in teaching will be demonstrated with a class of children in the middle grades. Attention will be given to several methods including particularly the experience unit. Demonstration will also be given of classroom grouping and methods of management and instruction with such groupings. Both theory and practice will be considered.

Clark Hall 207 Mon. through Fri., 9:15–11:40 A.M.

***ED.—S.225 A DEMONSTRATION IN METHODS AND MATERIALS IN TEACHING IN THE SECONDARY SCHOOL

Frank R. Yulo, *Durham Public Schools*
Dayton D. Shepherd, *Principal, Durham School, Durham, Conn.*

A series of carefully planned and evaluated experiences in the observation of children's activities utilizing modern methods and materials in an actual classroom situation on a secondary level. Attention will be given to several methods of approach particularly the core and experience unit. Observation of the dynamic classroom in action will enable the student to acquire first hand knowledge of the nature and needs of the growing child on the junior-senior high school level. Although essentially a demonstration experience, the course will include the theory behind the practice that is observed.

Clark Hall 207 Mon. through Fri., 9:15–11:40 A.M.

**Double Course, two classes daily, first three weeks, July 2—July 24.

***Double Course, two classes daily, second three weeks, July 25—August 17.

~~***ED.—S.237 SCHOOL ADMINISTRATION FROM THE STANDPOINT OF HUMAN RELATIONS~~

~~Vernon Jones, *Professor of Educational Psychology and Visiting Specialists*~~

~~The purpose of this practicum is to study (1) the problems of the inter-relations among teachers, supervisors, and administrators of schools, and the problems of public relations. Among the topics to be considered, with the aid of visiting specialists, are human relations within the school; democracy and management; group dynamics applied in schools and school systems; school and classroom management and the administrator; individual differences and the administrator; the problem of vocational or pre-vocational education; co-curricular activities in relation to teachers and administrators; teacher recruitment, selection, and development; teacher prestige in the community; home and school relationships; communication media and the school; guiding principles of school law relating to teachers and administrators; educators' relations with school committees and citizens' councils; the school and the community's cultural framework. A suitable course for administrators and for teachers who wish to prepare for supervisory responsibilities.~~

~~Clark Hall 305 Mon. through Fri., 10:30–12:55 P.M.~~

English

Intersession

F.—ENG.—S.11a ENGLISH COMPOSITION AND LITERATURE

Montagu F. Modder, *Professor of English, Beloit College*

The purpose of English 11 is to develop clarity and accuracy in reading and writing. After a short review of the principles of rhetoric, the course will be devoted to the study of expository essays and short stories. Themes and individual conferences. This course, together with English 11b, is a requirement for the Clark A.B.

Clark Hall 301 Mon. through Fri., 9:00–10:10 A.M. and 2:00–3:10 P.M.

ENG.—S.102 THE CONCEPT OF TRAGEDY IN ENGLISH AND AMERICAN LITERATURE

Karl O. E. Anderson, *Associate Professor of English*

This course will be devoted to the study of twelve famous English and American tragedies, including Marlowe's *Dr. Faustus*, Shakespeare's *Hamlet* and *King Lear*, Dryden's *All for Love*, Anderson's *Winterset*, O'Neill's *Beyond the Horizon*, and Miller's *Death of a Salesman*, in order to analyze the nature of tragedy, the source of its universal appeal, and the reasons why the concept of tragedy has varied from period to period.

Clark Hall 106 Mon. through Fri., 9:00 A.M. and 2:00 P.M.

Summer Session

F.—ENG.—S.11b ENGLISH COMPOSITION AND LITERATURE

William H. Carter, Jr., *Associate Professor of English*

This second half of the year course aims to help the student develop sound critical principles in evaluating fiction and poetry.

Clark Hall 301 Mon. through Fri., 9:15–10:25 A.M.

***Double Course, two classes daily, second three weeks, July 25—August 17.

F.—ENG.—S.12 PUBLIC SPEAKING

Donald H. Letendre, *Assistant Professor of English*

A course in the fundamentals of public speaking, emphasizing both the composition and delivery of the most common types of speeches, such as introductory, expository, and impromptu speeches. Special attention will be given to problems of human relations, voice tests, vocabulary development, and the acquisition of self-confidence, poise, and effective communication techniques. Practice speeches, conferences, and voice recordings to enable the student to recognize and correct his speech deficiencies. (Candidates for the B.B.A. degree should use course No. B.A.—S.17; candidates for the A.B. degree should use the course No. Eng.—S.12.)

Clark Hall 303 Mon. through Fri., 8:00–9:10 A.M.

ENG.—S.103 THE COMIC SPIRIT IN ENGLISH AND AMERICAN LITERATURE

William H. Carter, Jr., *Associate Professor of English*

The Comic Spirit will be studied in selected poems, plays, novels, short stories, and essays from Geoffrey Chaucer (in Modern English) to twentieth century writers such as G. B. Shaw, Evelyn Waugh, Ogden Nash, and James Thurber.

Clark Hall 106 Mon. through Fri., 8:00–9:10 A.M.

ENG.—S.106 CONTEMPORARY AMERICAN FICTION

James F. Beard, Jr., *Assistant Professor of English*

A critical introduction to the best American fiction since about 1900, with emphasis on its esthetic values, sociological insights, and philosophic implications. Authors read and discussed will include Henry James, Theodore Dreiser, F. Scott Fitzgerald, Sherwood Anderson, Thomas Wolfe, John Steinbeck, Ernest Hemingway, and William Faulkner.

Clark Hall 106 Mon., Wed. and Fri., 8:00–9:50 P.M.

ENG.—S.107 LITERATURE OF THE EAST

Montagu F. Modder, *Professor of English, Beloit College*

Selected significant masterpieces (in translation) from the secular and religious literature of India, China, and the countries of the Near East will be read and discussed, to discover their nature, their importance and relevance. The stated purpose of the course is to introduce the student to the variety, universality, and spirit of Oriental culture as manifested in the literature of Asia, and to increase the student's ability to enjoy and understand the secular and religious masterpieces of the Eastern world. One complete text will be studied and discussed each week. Whenever suitable arrangements can be made, visiting students and scholars will be asked to help in the discussions. One term paper will be required of each member of the class.

Clark Hall 102 Mon. through Fri., 10:30–11:40 A.M.

Fine Arts

Intersession

F.A.—S.122 AN INTRODUCTION TO SYMPHONIC MUSIC

Edward N. Hastings, *Lecturer, Clark Day and Evening College*

This course is designed to give the student a better understanding of symphonic music by tracing its development from the time of Bach to the present. In addition to the study of representative orchestral works by Bach, Haydn, Mozart, Beethoven, Brahms, Mendelssohn, Liszt and Wagner, the course will include a general study of the makeup and development of the modern symphony orchestra and an introduction to score-reading. Students will be expected to spend at least one hour daily outside of class listening to recordings of the works to be discussed. Satisfies Fine Arts requirement.

Atwood Hall — Mon. through Fri., 9:00 A.M. and 2:00 P.M.

F.A.—S.151 PAINTING AND SCULPTURE OF THE HIGH RENAISSANCE

Richard B. Carpenter, *Assistant Professor of Fine Arts*

After a discussion of the formation of the style of the High Renaissance, such principal exponents of the style as Leonardo, Raphael, Michelangelo, and Titian will be considered in detail. In addition to these, some of the less important figures will be considered briefly. The course will conclude with a discussion of the disintegration of the High Renaissance style and the early phase of Mannerism.

Clark Hall 218 — Mon. through Fri., 9:00 A.M. and 2:00 P.M.

Summer Session

~~F.A.—S.112 MUSIC IN EDUCATION~~

Stanl~~ey W. Norwood, *Director of Music, Worcester Public Schools*~~

~~For course description see section on Education.~~

G.E.—S.144 INTRODUCTION TO WESTERN CIVILIZATION

James S. Edwards, *Assistant Professor of German;*
Director of Dramatics

A lecture-study tour of Europe which will combine the customary formal instruction with exposure to places and scenes in which western man's experience actually took place. Included will be a survey of the West's institutional development and cultural life with emphasis on his expressive forms and activities in Art, Literature and Music.

The 51 day land tour will visit England, Holland, Germany, Austria, Italy and France and will span our cultural and social heritage from Greco-Roman times through the Renaissance to the present. Introductory lectures will be held on shipboard to the continent. Each student will be encouraged to develop a particular interest which he will be required to encompass in a report to be completed on the return voyage. Three semester hours credit, which will fulfill the Fine Arts requirement.

Because of the limited enrollment and demand an early application is necessary. Applications must be completed and the inclusive fee of $1000.00 must be paid by April 8th. Sailing date: June 8 from Montreal, return on August 15. Further information may be obtained from the Summer School office.

F.A.—S.171 MODERN ART

Richard B. Carpenter, *Assistant Professor of Fine Arts*

A survey of the principal schools of art from the French Revolution to the present. Emphasis will be placed upon painting although a few of the major sculptors and architects will also be discussed. The course is designed to develop in the student an understanding and appreciation of the various forms of modern art. No text will be used, but there will be assigned readings in the literary productions of both artists and critics.

Clark Hall 218 — Mon., Wed., Fri., 6:00–7:50 P.M.

Geography

Summer Session

F.—GEO.—S.16 ECONOMIC GEOGRAPHY

Edward C. Haskins, *Instructor in Geography, Yale University*

This course will describe the basic geographical patterns of (1) agriculture—crops, livestock, and agricultural systems—(2) industry, with special emphasis on the major industrial concentrations of the world, and (3) trade, as well as the associated patterns of physical and human (economic and technological) resources.

Geography Hall Mon. through Fri., 11:45–12:55 P.M.

GEO.—S.20 GEOGRAPHY IN EDUCATION

Henry J. Warman, *Associate Professor of Geography*

A survey of geography in the present-day American school system, designed to meet the needs of those expecting to teach geography. Techniques of teaching geography will be stressed.

Geography Hall Mon. through Fri., 8:00–9:10 P.M.

F.—GEO.—S.191 CARTOGRAPHY

Guy H. Burnham, *Instructor in Geography, Cartography*

A discussion of various graphic methods and their application to geographic data. Since emphasis will be placed upon the mastery of cartographic tools and instruments, this course should prove particularly helpful to those planning to enter government service or to do illustrative work. This course may be taken for double credit by special arrangement with the instructor.

Geography Hall Mon. through Fri., 10:30–11:40 A.M. and afternoon workshop

GEO.—S.201b PROBLEM AREAS IN THE WORLD: A POLITICAL GEOGRAPHIC EVALUATION

Samuel Van Valkenburg, *Professor of Geography*

This course covers the problem areas of the world, their causes and possible solutions, seen from the American point of view. It discusses such problems as the Arabs in North West French Africa, the controversy Israel versus the Arab States, the Kashmir case, the tendency toward the forming of a bloc of neutral states, the chance for unity in Germany and many others. All these are of vital importance not only to the peoples directly involved but also to the United States which tries to preserve peace in the world. (No prerequisites.)

Geography Hall Mon. through Fri., 9:15–10:25 A.M.

GEO.—S.288 THE TROPICAL WORLD

Edward C. Haskins, *Instructor in Geography, Yale University*

This course will deal with Nature and Man in the Tropics: tropical environment; economic, social, and political patterns in the American, African, and Asiatic tropics; and the problems of the development of tropical areas.

Geography Hall Mon. through Fri., 10:30–11:40 A.M.

GEO.—S.300 RESEARCH IN GEOGRAPHY

Graduate research studies may be carried out under the direction of available staff members during the Summer School. The course is primarily for those who have been previously enrolled in the Graduate School. Approval by the staff member will be required prior to admission.

History and Government

Intersession

HIST.—S.204 MODERN EUROPEAN INTELLECTUAL HISTORY

Marc Raeff, *Assistant Professor of History and Russian Language*

A combination lecture and seminar course of study of the currents of thought in the 18–20th centuries. By tracing the sources and evolution of key intellectual concepts and attitudes a better understanding of basic contemporary attitudes towards political, social and moral problems is obtained. Among the authors to be read are Rousseau, Hegel, de Maistre, Comte, Freud, Dostoevski, Camus, Lenin, Ortega y Gasset, Tocqueville, A. Koestler, M. Weber and K. Mannheim.

Clark Hall 212 Mon. through Fri., 9:00–10:10 A.M. and 2:00–3:10 P.M.

Summer Session

~~F.—GOV.—S.15b INTRODUCTION TO AMERICAN GOVERNMENT~~

~~John D. Cushing, *Visiting Lecturer*~~

~~A study of the functioning of the government of the United States with attention to contemporary problems of the federal government where applicable.~~

~~Clark Hall 104 Mon. through Fri., 10:30–11:40 A.M.~~

HIST.—S.26 MODERN LATIN AMERICA

Marvin D. Bernstein, *Instructor,*
Worcester State Teachers College

The objective of this course is to trace the development of the Latin American nations in the Twentieth Century. After a short consideration of the physical setting and early historical background of Latin America, an intensive treatment will be offered of the major Latin American social and economic problems and their effect upon the course of politics and government.

Clark Hall 220 Mon. through Fri., 10:30–11:40 A.M.

GOV.—S.142 WORLD AFFAIRS

Marvin D. Bernstein, *Instructor,*
Worcester State Teachers College

The purpose of this course is to examine the areas of tension which endanger world peace. Among the topics to be considered will be the Foreign Policy of the United States, The Atlantic Community and the Soviet Sphere of Influence, Problems of Colonialism Today, Sources of Conflict in the Middle East, and The International Position of the Far East. The emphasis will be upon the course of events since World War II, particularly as it is related to current events.

Clark Hall 102 Mon., Wed. and Fri., 6:00–7:50 P.M.

HIST.—S.231 AMERICAN COLONIAL HISTORY 1607–1775

George H. Merriam, *Lecturer, Clark Evening College*

A survey course with particular emphasis upon the New England area from the time of the first settlements to the revolutionary period. America's colonial past will be studied through lectures, original documents, and numerous field trips to early settlements in Plymouth, Deerfield, Concord, and other nearby areas. Other trips will be to the historical museums and the American Antiquarian Society. The central location in New England brings the study of our colonial development into bold relief through the intimate contact with the homes, churches, and meeting houses that are preserved to the present day.

Texts for the course will be Wright's "Atlantic Frontier," and Nettles' "Foundation of American Civilization."

Clark Hall 220 Mon. through Fri., 8:00 to 9:10 A.M.

HIST.—S.233 THE WEST IN AMERICAN HISTORY

Henry C. Borger, Jr., *Associate Professor of Education*

Beginning about the time of the American Revolution when the line of the frontier was at the Appalachian Mountains, this course will trace the movement of population, the growth of settlements, and the development of the American institutions as they advanced toward the Pacific Ocean. Social, geographic, and economic factors will be included with this historical study, which will conclude with a consideration of the influence of this westward movement on the American past and present.

Clark Hall 220 Mon. through Fri., 9:15–10:25 A.M.

HIST.—S.239 AMERICA IN PERSPECTIVE

Robert J. Hybels, *Assistant Professor of Education*

American civilization seen from the perspective of Western Europe during the past one hundred and fifty years. A major objective of the course will be to improve our understanding of America by finding out how it looks from a distance and from outside, particularly how it looks to other western peoples with whom we share a common cultural ancestry. A survey will be made of interpretative commentaries on American life by foreign observers like Alexis de Tocqueville and James Bryce during the nineteenth century, and André Siegfried and Denis Brogan during the twentieth century, with a view toward discovering agreement on the permanent rather than transient traits of American character. The current and past reputation of American democracy, education, literature, etc., will be discussed by all, but, at the same time, individual specialization in a single aspect of American civilization will be encouraged. Readings will be supplemented by visiting foreign students and Americans who have lived abroad.

Clark Hall 102 Mon., Wed. and Fri., 8:00–9:50 P.M.

~~HIST.—S.291 FRANCE AND THE NORTH AFRICAN CRISIS~~

~~Jacques P. Pagès, *Visiting Lecturer*~~

~~Beginning with a survey of the economic and social realities of North Africa and with an appraisal of French intervention and policies in that area, the course deals with the rise of Moslem nationalisms and of the political and economic problems which confront them. In the light of the international situation, it concludes with a discussion of the diplomatic problems arising in that sensitive and dangerous zone.~~

~~Clark Hall 220 Mon. through Fri., 11:45–12:55 P.M.~~

LANGUAGES

French

Summer Session

*F.—FR.—S.12 INTERMEDIATE FRENCH

J. Richard Reid, *Associate Professor of Romance Languages*
Theodore Nicol, *Associate Professor of Romance Languages*

This course aims to develop all the fundamental skills—pronunciation, conversation, grammar, reading—necessary as a basis for any effective use of the language.

*Double Course, two classes daily through summer session.

The approach will be conversational insofar as practicable. Carefully graded readings will be chosen primarily for affording insights into the culture of France. Open to students who have had the elements of French in a first-year college course or the equivalent. Indivisible course.

Clark Hall 104 Mon. through Fri., 9:15–10:25 A.M. and 2:00–3:10 P.M.

*F.—FR.—S.14 READINGS IN FRENCH LITERATURE

Theodore Nicol, *Associate Professor of Romance Languages*
J. Richard Reid, *Associate Professor of Romance Languages*

A third-year course, designed first to perfect the student's techniques of reading, and second to give an understanding of a number of French works of universal importance and appeal. Open to students who have had a second-year college French course or the equivalent.

Library Mon. through Fri., 9:15–10:25 A.M. and 2:00–3:10 P.M.

German

*F.—GER.—S.11 INTRODUCTORY GERMAN

Karl J. Arndt, *Professor of German*

The regular material of the first year of college German is covered: pronunciation, basic vocabulary, elements of grammar, composition, and reading of suitable German prose. An intensive course for students interested in devoting full time and complete attention to the study of German during the summer session.

Clark Hall 106 Mon. through Fri., 9:15–10:25 A.M. and 2:00–3:10 P.M.

*F.—GER.—S.12 INTERMEDIATE GERMAN

Murat H. Roberts, *Emeritus Professor,*
University College and Graduate School, New York University

Review of grammar, translation from and into German, rapid reading of modern German prose. An intensive course covering the material of the regular second year of college German. The course will demand the full time and attention of those interested.

Clark Hall 102 Mon. through Fri., 9:15 to 10:25 A.M. and 2:00 to 3:10 P.M.

Spanish

*F.—SP.—S.11 INTRODUCTORY SPANISH

Helen Agbay, *Lecturer in Clark University Evening College*

For beginners. The elements of grammar and pronunciation; carefully graded reading; exercises in speaking and writing.

Clark Hall 212 Mon. through Fri., 9:15–10:25 A.M. and 2:00–3:10 P.M.

*F.—SP.—S.12 INTERMEDIATE SPANISH

Instructor to be announced

This course aims to develop all the fundamental skills—pronunciation, conversation, grammar, reading—necessary as a basis for any effective use of the language. The approach will be conversational insofar as practicable. Carefully graded readings will be chosen primarily to afford some insights into Hispanic culture, of both Spain and Spanish America. Open to students who have had the elements of Spanish in a first-year college course or the equivalent. Indivisible course.

Library Mon. through Fri., 9:15–10:25 A.M. and 2:00–3:10 P.M.

***Double Course, two classes daily, through summer session.**

*F.—SP.—S.14 READINGS IN SPANISH AND SPANISH AMERICAN LITERATURE

Manuel Durán, *Assistant Professor, Smith College*

A third-year course designed first to perfect the student's techniques of reading, and second to give an understanding of a number of works of universal importance and appeal. The first half will be devoted to Spanish America, the second half to Spain. Open to students who have had a second-year college Spanish course or the equivalent.

Library Mon. through Fri., 9:15–10:25 A.M. and 2:00–3:10 P.M.

Mathematics

Summer School

F.—MATH.—S.11b TRIGONOMETRY AND ANALYTICAL GEOMETRY

John S. Stubbe, *Associate Professor of Mathematics*

This course is the second half of a year course in Freshman Mathematics. Careful attention is given to fundamental concepts and to the development of useful techniques. Topics in trigonometry and analytic geometry are introduced. If an entering student passes this course he may take Math. 12, Calculus, in the fall.

Clark Hall 218 Mon. through Fri., 8:00–9:10 A.M.

MATH.—S.15 NUMERICAL ANALYSIS

John S. Stubbe, *Associate Professor of Mathematics*

This course will treat selected topics from the following: Polynomial interpolation, numerical differentiation and integration, numerical summation of series, numerical solution of ordinary differential equations, error analysis, least square polynomial approximation, approximation by trigonometric and exponential functions, numerical solution of equations and sets of equations.

Clark Hall 218 Mon. through Fri., 10:30 to 11:40 A.M.

Philosophy

Intersession

~~PHIL.—S.101 PHILOSOPHY OF SCIENCE~~

~~Richard H. Schlagel, *Instructor in Philosophy*~~

Omitted

~~The purpose of this course is threefold: (1) to determine and examine the methodologies and theoretical foundations of the physical, biological, and social sciences; (2) to show how science rests upon, but provides an extension of, and means of controlling, ordinary experience; (3) to investigate the implications of the recent developments in physics, mathematics, and logic for philosophy and common-sense. The class will discuss such topics as the difference between the formal and the factual sciences, the logic and foundation of modern physics, the nature of a logical or mathematical system and the structure of scientific theories and laws. Further discussions will be centered on such notions as causality, inductive and deductive reasoning, verification and explanation, and the scope and limits of science and its prospects for the future.~~

~~Clark Hall 104 Mon. through Fri., 9:00–10:10 A.M. and 2:00–3:10 P.M.~~

*Double Course, two classes daily through summer session.

Summer Session

PHIL.—S.114 THE PHILOSOPHY OF AMERICANISM

Robert Beck, *Assistant Professor of Philosophy*

The religious and philosophical foundations of Americanism. A survey of the major ideas which were operative in the formation of America's political institutions; and an attempt to develop a philosophy of democracy adequate to America's historical experiences. (No prerequisites.)

Clark Hall 303 Mon. through Fri., 9:15–10:25 A.M.

PHIL.—S.121 CLASSICAL AMERICAN PHILOSOPHERS

Robert Beck, *Assistant Professor of Philosophy*

Study and discussion of selections from the writings of the six classical American philosophers: C. S. Peirce, William James, Josiah Royce, John Dewey, Alfred North Whitehead, George Santayana. Various aspects of their thought will be examined and compared, and their relation to the Americanism of their times will be noted. (No prerequisites.)

Clark Hall 104 Mon. through Fri., 8:00–9:10 P.M.

Psychology

Intersession

PSY.—S.172 THEORIES OF PERSONALITY

Robert W. Baker, *Assistant Professor of Psychology*

This course will deal with a number of the determinants of personality formation including constitutional determinants and culturally imposed factors. Current theories of personality development will be discussed and applied to the study of personality.
Prerequisite: An introductory course in Psychology.

Clark Hall 320 Mon. through Fri., 9:00–10:10 A.M. and 2:00–3:10 P.M.

Summer Session

~~PSY.—S.180 CULTURE AND PERSONALITY~~

~~Robert Misch, *Clinical Psychologist, Boston V.A. Hospital, Boston, Massachusetts*~~

~~A study of significant socio-cultural variables and the implication of these to personality theory through an intensive investigation of the Navaho and Hopi Indian tribes and through critical writings on other problems of "national character."~~
~~Prerequisite: A course in Personality and preferably one in Abnormal Psychology.~~

~~Clark Hall 320 Mon. through Fri., 8:00–9:10 A.M.~~

PSY.—S.188 PSYCHOLOGY OF COMMUNICATION AND UNDERSTANDING

Bernard Kaplan, *Assistant Professor of Psychology*

A course designed to acquaint students with the psychological factors determining the intentions, content and methods entering into the communication and understanding of the feelings, attitudes and beliefs of ourselves and others. The course deals with the nature and conditions of communication and understanding not only within different types of individuals (young children, normal adults, mentally sick) but also between different societies and cultures; it is intended to provide a foundation for the psychological comprehension of all forms of interaction between groups and among individuals.

Clark Hall 320 Mon., Wed. and Fri., 8:00–9:50 P.M.

~~PSY.—S.203 ABNORMAL PERSONALITY~~

~~Melvin H. Feffer, *Research Psychologist, Worcester State Hospital*~~

~~The course will be devoted to a study of the development of the abnormal personality and a survey of the major types of abnormal behavior.~~
~~Prerequisite: Psychology S.172.~~

~~Clark Hall 203 Mon. through Fri., 11:45–12:55 P.M.~~

~~PSY.—S.350 RESEARCH IN PSYCHOLOGY~~

~~Graduate research studies may be carried out under the direction of available staff members during the Summer School. The course is primarily for those who have been previously enrolled in the Graduate School. Approval by the staff member will be required prior to admission.~~

Sociology

Intersession

SOC.—S.215 CLASS STRUCTURE IN AMERICAN SOCIETY

Ely Chinoy, *Assistant Professor of Sociology, Smith College*

An analysis of the American class system with particular emphasis upon the nature and role of the middle class, and of the social consequences of economic stratification, status systems, and social mobility.

Clark Hall 102 Mon. through Fri., 10:00–12:30 P.M.

Summer School

F.—SOC.—S.11a UNDERSTANDING OUR SOCIETY

Frederick W. Killian, *Associate Professor of Sociology*

This is an introductory course in understanding the society in which we live. How this system of customs, conventions, relationships has begun, grown and developed. It is a study of the framework of order and of institutions in which we find our needs and satisfactions and in which we relate to other people through status, playing roles, moving towards goals and interests. It is a study of the relationships between these goals, interests, values and conventions. This course stresses the elementary concepts of the field based on a comprehensive text and upon discussion.

Clark Hall 106 Mon. through Fri., 10:30–11:40 A.M.

SOC.—S.224 SOCIOLOGY OF CITY LIFE: URBAN SOCIOLOGY

F. W. Killian, *Associate Professor of Sociology*

The historical development of the city. The cultural characteristics of the city. The city as a stimulus to the development of culture. Town, hamlet and city state. From primary to secondary group life. The modern city and its locus. The movement of city centers in Western Civilization. The city and modern industrial organization. The city and centralization of life and decentralization. Personality types in the modern city. Problems of the city in its government, community life and pathologies.
Open to students having the equivalent of Soc. 11a and b or with permission of instructor.

Clark Hall 106 Mon. through Fri., 11:45–12:55 P.M.

JUNE 11 — INTERSESSION — JUNE 30

Classes Meet Daily, Monday through Friday—9:00 to 10:10 A.M. and 2:00 to 3:10 P.M.—3 Credits

Bio.	S.224	Neuroanatomy	Eng.	S.11a	English Comp. and Lit.	Hist.	S.204	European Intellectual History
BA.	S.132	Human Relations in Industry	Eng.	S.102	The Concept of Tragedy	Phil.	S.101	The Philosophy of Science
Ec.	S.11a	Principles of Economics	FA.	S.122	Intro. to Symphonic Music	Psy.	S.172	Theories of Personality
Ec.	S.15	Public Finance	FA.	S.151	Art of the Renaissance	Soc.	S.215	Class Structure in America

JULY 2 — SUMMER SESSION — AUGUST 17

Morning Classes Meet Daily Monday through Friday—3 Credits

8:00 to 9:10	Bio.	S.244	Biochemistry	Hist.	S.231	American Colonial History
	Eng.	S.12	Public Speaking	Math.	S.11b	Trig. and Analyt. Geom.
	Eng.	S.103	The Comic Spirit	Phil.	S.121	Classical Am. Philosophers
	Geo.	S.20	Geography in Education	Psy.	S.180	Culture and Personality
9:15 to 10:25	Ec.	S.11b	Principles of Economics	Hist.	S.233	The West in Am. Hist.
	Eng.	S.11b	English Comp. and Lit.	Phil.	S.114	Philosophy of Americanism
	Geo.	S.201	Problem Areas of the World	Psy.	S.203	Abnormal Psychology
10:30 to 11:40	Bio.	S.19	Human Anat. and Physiol.	Gov.	S.15b	Intro. to Am. Gov.
	Ec.	S.21	Nat'l Income Analysis	Hist.	S.26	Hist. of Latin America
	Eng.	S.107	Literature of the East	Math.	S.15	Numerical Analysis
	Geo.	S.288	The Tropical World	Soc.	S.11a	Understanding Our Society
11:45 to 12:55	Bio.	S.112	Man's Heredity & Evol.	Hist.	S.291	France's Colonial Crisis
	Ed.	S.217	Com. Resources in Teach.	Psy.	S.203	Abnormal Personality
	FA.	S.112	Music in Education	Soc.	S.224	Sociology of the City
	Geo.	S.16	Economic Geography	Geo.	S.191	Cartography (1:30 P.M.)

Evening Classes Meet Monday, Wednesday and Friday—3 Credits

6:00 to 7:50	BA.	S.109	Sales Management	FA.	S.171	Modern Art
	Eng.	S.106	Contemp. Am. Fiction	Hist.	S.142	World Affairs
8:00 to 9:50	BA.	S.17	Public Speaking	Hist.	S.239	America in Perspective
	BA.	S.124	Marketing Problems	Psy.	S.188	Psych. of Communication

DOUBLE TIME COURSES

Two Class Meetings Monday through Friday

Year Courses—6 Weeks—July 2—August 17

6 Credits

BA.	S.16	Business Statistics	9:15 & 10:30
Che.	S.13	Organic Chemistry	8:00 & 9:15
Fr.	S.12	Intermed. French	9:15 & 2:00
Fr.	S.14	Readings in French Lit.	9:15 & 2:00
Ger.	S.11	Beginning German	9:15 & 2:00
Ger.	S.12	Intermediate German	9:15 & 2:00
Sp.	S.11	Beginning Spanish	9:15 & 2:00
Sp.	S.12	Intermed. Spanish	9:15 & 2:00
Sp.	S.14	Readings in Spanish Lit.	9:15 & 2:00

SEMESTER COURSES

First Three Weeks—July 2—July 24—3 Credits

Ed.	S.201	Child Growth and Devel.	10:30 & 11:45
Ed.	S.223	Demonstr. Element. Teach.	9:15 & 10:30
Ed.	S.213	Guidance Services	10:30 & 11:45

Second Three Weeks—July 25—August 17

3 Credits

Ed.	S.204	Child Devel. and Curriculum	10:30 & 11:45
Ed.	S.225	Demonstr. H.S. Teaching	9:15 & 10:30
Ed.	S.237	School Administration	10:30 & 11:45

NOTE: Travel Course to Europe GE. S.144, Introduction to Western Civilization—Leaves Montreal June 8

CLARK UNIVERSITY

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